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PASSWORD:
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NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	AUG 10	Time limit for inactive STN sessions doubles to 40 minutes
NEWS 3	AUG 18	COMPENDEX indexing changed for the Corporate Source (CS) field
NEWS 4	AUG 24	ENCOMPLIT/ENCOMPLIT2 reloaded and enhanced
NEWS 5	AUG 24	CA/CAplus enhanced with legal status information for U.S. patents
NEWS 6	SEP 09	50 Millionth Unique Chemical Substance Recorded in CAS REGISTRY
NEWS 7	SEP 11	WPIDS, WPINDEX, and WPIX now include Japanese FTERM thesaurus
NEWS 8	OCT 21	Derwent World Patents Index Coverage of Indian and Taiwanese Content Expanded
NEWS 9	OCT 21	Derwent World Patents Index enhanced with human translated claims for Chinese Applications and Utility Models
NEWS 10	NOV 23	Addition of SCAN format to selected STN databases
NEWS 11	NOV 23	Annual Reload of IFI Databases
NEWS 12	DEC 01	FRFULL Content and Search Enhancements
NEWS 13	DEC 01	DGENE, USGENE, and PCTGEN: new percent identity feature for sorting BLAST answer sets
NEWS 14	DEC 02	Derwent World Patent Index: Japanese FI-TERM thesaurus added
NEWS 15	DEC 02	PCTGEN enhanced with patent family and legal status display data from INPADOCDB
NEWS 16	DEC 02	USGENE: Enhanced coverage of bibliographic and sequence information
NEWS 17	DEC 21	New Indicator Identifies Multiple Basic Patent Records Containing Equivalent Chemical Indexing in CA/CAplus
NEWS 18	JAN 12	Match STN Content and Features to Your Information Needs, Quickly and Conveniently
NEWS 19	JAN 25	Annual Reload of MEDLINE database
NEWS 20	FEB 16	STN Express Maintenance Release, Version 8.4.2, Is Now Available for Download
NEWS 21	FEB 16	Derwent World Patents Index (DWPI) Revises Indexing of Author Abstracts
NEWS 22	FEB 16	New FASTA Display Formats Added to USGENE and PCTGEN
NEWS 23	FEB 16	INPADOCDB and INPAFAMDB Enriched with New Content and Features

NEWS 24 FEB 16 INSPEC Adding Its Own IPC codes and Author's E-mail Addresses

NEWS EXPRESS FEBRUARY 15 10 CURRENT WINDOWS VERSION IS V8.4.2, AND CURRENT DISCOVER FILE IS DATED 15 JANUARY 2010.

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FILE 'HOME' ENTERED AT 16:16:43 ON 27 MAR 2010

=> FIL REG

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.44	0.44

FILE 'REGISTRY' ENTERED AT 16:17:34 ON 27 MAR 2010
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 26 MAR 2010 HIGHEST RN 1214987-89-9
DICTIONARY FILE UPDATES: 26 MAR 2010 HIGHEST RN 1214987-89-9

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TSCA INFORMATION NOW CURRENT THROUGH January 8, 2010.

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

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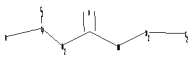

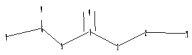

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1 2 3 4 5 6 7 9 11
chain bonds :
1-2 1-3 2-11 3-4 3-5 5-6 6-7 6-9
exact/norm bonds :
1-2 1-3 2-11 3-4 5-6 6-7 6-9
exact bonds :
3-5

G1:CH3,Et,CF3,MeO,X

G2:Cb,Ak

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:Atom 7:CLASS 9:CLASS 11:CLASS
Generic attributes :
6:
Saturation : Unsaturated

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L1 HAS NO ANSWERS
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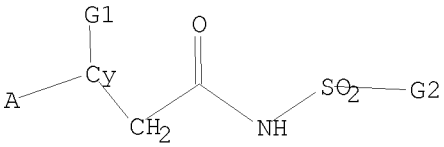

G1 Me,Et,CF3,MeO,X

G2 Cb,Ak

Structure attributes must be viewed using STN Express query preparation.

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=> S L1
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SAMPLE SCREEN SEARCH COMPLETED -     6806 TO ITERATE

 29.4% PROCESSED     2000 ITERATIONS                                4 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:       131173 TO   141067
PROJECTED ANSWERS:              51 TO      493

L2            4 SEA SSS SAM L1

=> D SCAN
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L2 4 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN
IN Benzeneacetamide,
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2-thienyl]propyl]-2-methyl-N-[(1-methylethyl)sulfonyl]-
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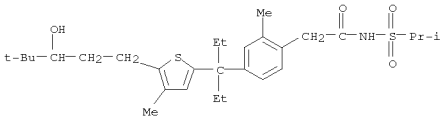

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

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=> S L1 FULL
FULL SEARCH INITIATED 16:18:06 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -   137404 TO ITERATE

100.0% PROCESSED   137404 ITERATIONS                              470 ANSWERS
SEARCH TIME: 00.00.07

L3          470 SEA SSS FUL L1

=> FIL CAPLUS
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                     191.54     191.98

FILE 'CAPLUS' ENTERED AT 16:18:27 ON 27 MAR 2010
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FILE COVERS 1907 - 27 Mar 2010  VOL 152 ISS 14
FILE LAST UPDATED: 26 Mar 2010  (20100326/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Dec 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Dec 2009

CAplus now includes complete International Patent Classification (IPC)
reclassification data for the first quarter of 2010.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
substance identification.

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L4          140 L3

=> S L4 AND PY<2004
      24050550 PY<2004
L5          102 L4 AND PY<2004

=> S L4 AND PRY<2004
        4301790 PRY<2004
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L6          106 L4 AND PRY<2004

=> S L5 OR L6
L7          109 L5 OR L6

=> D IBIB 1
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L7 ANSWER 1 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:857325 CAPLUS
DOCUMENT NUMBER: 141:350033
TITLE: Preparation of 5-methoxy-2-methylindole-3-acetamide derivs. as potassium channel blockers for treating ocular hypertension
INVENTOR(S): Fisher, Michael H.; Garcia, Maria L.; Kaczorowski, Gregory J.; Meinke, Peter T.; Parsons, William H.; Boyd, Edward Andrew; Price, Stephen; Stibbard, John
PATENT ASSIGNEE(S): Merck & Co., Inc., USA; Evotec Oai
SOURCE: PCT Int. Appl., 109 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004087051	A2	20041014	WO 2004-US9028	20040324
WO 2004087051	A3	20050721		
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RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004226479	A1	20041014	AU 2004-226479	20040324
CA 2519899	A1	20041014	CA 2004-2519899	20040324
EP 1610776	A2	20060104	EP 2004-758273	20040324
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
CN 1791402	A	20060621	CN 2004-80013916	20040324
JP 2006524239	T	20061026	JP 2006-509260	20040324
US 20060069256	A1	20060330	US 2005-542169	20050713
US 7414067	B2	20080819		
IN 2005DN04100	A	20070831	IN 2005-DN4100	20050912
PRIORITY APPLN. INFO.:			US 2003-458103P P	20030327
			WO 2004-US9028 A	20040324

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

L7 ANSWER 1 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
OTHER SOURCE(S): CASREACT 141:350033; MARPAT 141:350033
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D IBIB 2-5

L7 ANSWER 2 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:675710 CAPLUS
DOCUMENT NUMBER: 141:190512
TITLE: A preparation of 2-arylacetic acid derivatives, useful
for the treatment of IL-8 mediated diseases
INVENTOR(S): Moriconi, Alessio; Allegretti, Marcello; Bertini, Riccardo; Cesta, Maria Candida; Bizzarri, Cinzia; Colotta, Francesco
PATENT ASSIGNEE(S): Dompe' S.p.A., Italy
SOURCE: PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004069782	A2	20040819	WO 2004-EP1021	20040204
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WO 2004069782	A3	20040916		
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RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004210082	A1	20040819	AU 2004-210082	20040204
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EP 1590314	A2	20051102	EP 2004-707926	20040204
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CN 1768026	A	20060503	CN 2004-80008741	20040204
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CN 100562511	C	20091125		
JP 2006516592	T	20060706	JP 2006-501731	20040204
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RU 2356887	C2	20090527	RU 2005-127777	20040204
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US 20060223842	A1	20061005	US 2005-541429	20050705
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NO 2005004017	A	20050830	NO 2005-4017	20050830
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PRIORITY APPLN. INFO.:	EP 2003-2716	A	20030206
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	WO 2004-EP1021	W	20040204

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 141:190512

L7 ANSWER 2 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:610159 CAPLUS
DOCUMENT NUMBER: 141:174068
TITLE: Vesicant treatment with (phenylalkyl)thiophenes as vitamin D receptor modulators
INVENTOR(S): Nagpal, Sunil
PATENT ASSIGNEE(S): Eli Lilly and Company, USA; Yee, Ying Kwong
SOURCE: PCT Int. Appl., 496 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004063348	A2	20040729	WO 2004-US6	20040107
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WO 2004063348	A3	20051027		
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EP 1587905	A2	20051026	EP 2004-700549	20040107
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EP 1587905	A3	20051214		
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US 20060135484	A1	20060622	US 2005-540667	20050624
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PRIORITY APPLN. INFO.:	US 2003-439575P	P	20030110
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	WO 2004-US6	W	20040107

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 141:174068
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:392321 CAPLUS
DOCUMENT NUMBER: 140:406826
TITLE: Preparation of N-benzylpiperazine derivatives as chemokine receptor CCR1 antagonists useful as immunomodulatory agents
INVENTOR(S): Blumberg, Laura C.; Brown, Matthew F.; Gaweco, Anderson S.; Gladue, Ronald P.; Hayward, Matthew M.; Lundquist, Gregory D.; Poss, Christopher S.; Shavnya, Andrei
PATENT ASSIGNEE(S): Pfizer Inc, USA
SOURCE: U.S. Pat. Appl. Publ., 58 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040092529	A1	20040513	US 2003-686993	20031016
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OTHER SOURCE(S):	MARPAT 140:406826		

L7 ANSWER 5 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:387265 CAPLUS
DOCUMENT NUMBER: 140:391297
TITLE: Preparation of piperazine derivatives as CCR1 antagonists
INVENTOR(S): Blumberg, Laura Cook; Brown, Matthew Frank; Gaweco, Anderson See; Gladue, Ronald Paul; Hayward, Matthew Merrill; Lundquist, Gregory Dean; Poss, Christopher Stanley; Shavnya, Andre
PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: PCT Int. Appl., 131 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004039376	A1	20040513	WO 2003-IB4612	20031020
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CA 2498261	A1	20040513	CA 2003-2498261	20031020
AU 2003269364	A1	20040525	AU 2003-269364	20031020
BR 2003015777	A	20050913	BR 2003-15777	20031020
EP 1583533	A1	20051012	EP 2003-751145	20031020
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JP 2006506391	T	20060223	JP 2004-547876	20031020
MX 2005004650	A	20050608	MX 2005-4650	20050429

PRIORITY APPLN. INFO.: US 2002-422590P P 20021030
WO 2003-IB4612 W 20031020

OTHER SOURCE(S): MARPAT 140:391297
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

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     (FILE 'HOME' ENTERED AT 16:16:43 ON 27 MAR 2010)

     FILE 'REGISTRY' ENTERED AT 16:17:34 ON 27 MAR 2010
L1             STRUCTURE UPLOADED
L2               4 S L1
L3             470 S L1 FULL

     FILE 'CAPLUS' ENTERED AT 16:18:27 ON 27 MAR 2010
L4             140 S L3
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L7             109 S L5 OR L6

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L8             96 L4 AND PY<2003

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L7 ANSWER 1 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:857325 CAPLUS
DOCUMENT NUMBER: 141:350033
TITLE: Preparation of 5-methoxy-2-methylindole-3-acetamide derivs. as potassium channel blockers for treating ocular hypertension
INVENTOR(S): Fisher, Michael H.; Garcia, Maria L.; Kaczorowski, Gregory J.; Meinke, Peter T.; Parsons, William H.; Boyd, Edward Andrew; Price, Stephen; Stibbard, John
PATENT ASSIGNEE(S): Merck & Co., Inc., USA; Evotec Oai
SOURCE: PCT Int. Appl., 109 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2004087051	A3	20050721		
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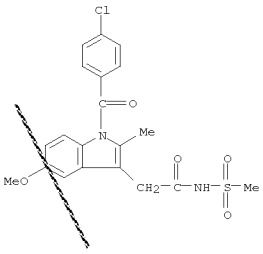
WO 2004-US9028 A 20040324

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

L7 ANSWER 1 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
OTHER SOURCE(S): CASREACT 141:350033; MARPAT 141:350033
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. I [X = -(CHR7)p-; Y = -CO(CH2)n- or -CH(OR8)-; Q = N, CR9, or O; R1 = H, alkyl, CF3, alkoxy, OH, etc.; R2 = H, alkyl, alkylSR8, -(CH2)nO(CH2)mOR8, -(CH2)alkoxy, etc.; R3 = H, alkyl, -(CH2)ncycloalkyl, -(CH2)nheterocyclyl, or when Q = N, R2, R3 taken together with the the N form a 4-10 membered heterocyclic ring; R4, R5 = H, alkoxy, OH, alkyl, COOR8, SO3H, etc.; R6 = H, alkyl, -(CH2)(hetero)aryl, -NH(CH2)(hetero)aryl, etc.; R7 = H, alkyl, -(CH2)nCOOR8, or -(CH2)nN(R8)2; R8 = H, or alkyl; R9 = H, or alkyl; m = 0-3; n = 0-3, p = 0-1] were prepared as potent potassium channel blockers in the treatment of glaucoma and other conditions which leads to elevated intraocular pressure in the eye of a patient. For example, reaction of 1-(4-chlorobenzoyl)-5-methoxy-2-methylindole-3-acetic acid with N-cyclohexyl-N-thiazol-2-yl amine (preparation given) yielded compound II. The compds. of this invention inhibited Maxi-K Channel activity with IC50's in the range of 1 nM to 20 μM.
IT 76812-29-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 5-methoxy-2-methylindole-3-acetamide derivs. as potassium channel blockers for treating ocular hypertension)
RN 76812-29-8 CAPLUS
CN 1H-Indole-3-acetamide, 1-(4-chlorobenzoyl)-5-methoxy-2-methyl-N-(methylsulfonyl)- (CA INDEX NAME)



L7 ANSWER 1 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:675710 CAPLUS
DOCUMENT NUMBER: 141:190512
TITLE: A preparation of 2-arylacetic acid derivatives, useful for the treatment of IL-8 mediated diseases
INVENTOR(S): Moriconi, Alessio; Allegretti, Marcello; Bertini, Riccardo; Cesta, Maria Candida; Bizzarri, Cinzia; Colotta, Francesco
PATENT ASSIGNEE(S): Dompe' S.p.A., Italy
SOURCE: PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004069782	A2	20040819	WO 2004-EP1021	20040204
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WO 2004069782	A3	20040916		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004210082	A1	20040819	AU 2004-210082	20040204
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CA 2511582	A1	20040819	CA 2004-2511582	20040204
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EP 1590314	A2	20051102	EP 2004-707926	20040204
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1768026	A	20060503	CN 2004-80008741	20040204
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CN 100562511	C	20091125		
JP 2006516592	T	20060706	JP 2006-501731	20040204
<--				
RU 2356887	C2	20090527	RU 2005-123733	20040204
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US 20060223842	A1	20061005	US 2005-541429	20050705
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NO 2005004017	A	20050830	NO 2005-4017	20050830
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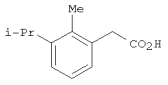
PRIORITY APPLN. INFO.: EP 2003-2716 A 20030206
<--
WO 2004-EP1021 W 20040204

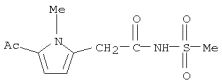
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 141:190512
GI

L7 ANSWER 2 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



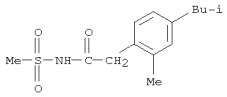
I

AB The invention relates to a preparation of 2-arylacetic acid derivs. of formula
A-CH2C(O)-Y [wherein: A is a 5 to 6 membered (hetero)aromatic ring where heteroatom is selected from N, O, S, etc.; the 5-6 membered (hetero)aromatic
ring is optionally fused with a second ring; Y is NH2, NH-(cyclo)alkyl, or
NH-cycloalkenyl, etc.], useful in inhibiting chemotactic activation of neutrophils (PMN leukocytes) induced by the interaction of Interleukin-8 (IL-8) with CXCR1 and CXCR2 membrane receptors. The compds. are used for the prevention and treatment of pathologies deriving from said activation.
In particular, o-substituted arylacetic acid derivs., such as amides and sulfonamides, lack cyclo-oxygenase inhibition activity and are particularly useful in the treatment of neutrophil-dependent pathologies such as psoriasis, ulcerative colitis, or melanoma, etc. For instance, prepared in the example 2 acetic acid derivative I (10-8M) showed 62% (IL-8) and
5% (GRO-α) inhibitory activity on CXCR1 and CXCR2 receptors.
IT 740839-45-6P 740839-46-7P 740839-47-8P
740839-48-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of arylacetic acids useful for the treatment of IL-8 mediated
diseases)
RN 740839-45-6 CAPLUS
CN 1H-Pyrrole-2-acetamide, 5-acetyl-1-methyl-N-(methylsulfonyl)- (CA INDEX NAME)

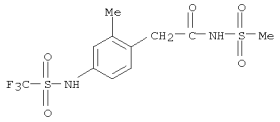


RN 740839-46-7 CAPLUS
CN Benzeneacetamide, 2-methyl-4-(2-methylpropyl)-N-(methylsulfonyl)- (CA INDEX NAME)

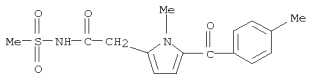
L7 ANSWER 2 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 740839-47-8 CAPLUS
CN Benzeneacetamide, 2-methyl-N-(methylsulfonyl)-4-[[(trifluoromethyl)sulfonyl]amino]- (CA INDEX NAME)



RN 740839-48-9 CAPLUS
CN 1H-Pyrrole-2-acetamide, 1-methyl-5-(4-methylbenzoyl)-N-(methylsulfonyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:610159 CAPLUS
DOCUMENT NUMBER: 141:174068
TITLE: Vesicant treatment with (phenylalkyl)thiophenes as vitamin D receptor modulators
INVENTOR(S): Nagpal, Sunil
PATENT ASSIGNEE(S): Eli Lilly and Company, USA; Yee, Ying Kwong
SOURCE: PCT Int. Appl., 496 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004063348	A2	20040729	WO 2004-US6	20040107
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WO 2004063348	A3	20051027		
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EP 1587905	A2	20051026	EP 2004-700549	20040107
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EP 1587905	A3	20051214		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 20060135484	A1	20060622	US 2005-540667	20050624
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PRIORITY APPLN. INFO.:			US 2003-439575P	P 20030110
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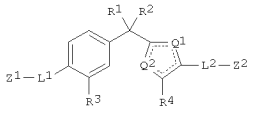
			WO 2004-US6	W 20040107

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 141:174068
GI



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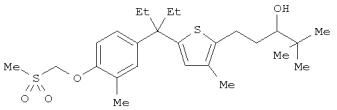

II

L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

AB The present invention relates to a method of treating or preventing damage
to human skin cells by chemical vesicants, such as mustard, by administering
non-secosteroidal, title compds. I [wherein R1 and R2 = independently (fluoro)alkyl; or CR1R2 = (un)substituted carbocycle; Q1 and Q2 = C, S, with the proviso that one atom = S and the other atom = C; R3 and R4 = independently H, halo, (fluoro)alkyl, (fluoro)alkoxy, (fluoro)alkylthio, CN, NO2, acetyl, (cyclo)alkenyl, cycloalkyl; L1 and L2 = independently a bond, (CH2)mCX1, (CH2)mCHOH, (CH2)mO, (CH2)mS, (CH2)mSO, (CH2)mSO2, (CH2)mNR5, (CH2)mC(R5)2, (CH2)mC.tplbond.C, (CH2)mCH=CH, CHOHCX1, SO2NH, SO2O, SO2CX1, NHCCX1, NHSO, CH2SO, OSO; m = 0-2; X1 = O, S; R5 = H, (fluoro)alkyl; Z1 and Z2 = independently H, OH, halo, formyl, NO2, CN, (fluoro)phenyl, benzyl, (un)substituted (cyclo)alkyl, (cyclo)alkenyl, acyl, carboxy, carbamoyl, alkoxy, alkylthio, sulfamoyl, (thio)ureido, amino, etc.; with provisos; and pharmaceutically acceptable salts or prodrugs thereof] with vitamin D receptor (VDR) modulating activity. Examples include prepns. and bioassays for efficacy and toxicity of representative I. For instance, reaction of 3-[4-(benzyloxy)-3-methylphenyl]-3-[4-methyl-5-(hydroxymethyl)thiophen-2-yl]pentane with PBr3 and LiHMDS, followed by addition of pinacolone gave the
5-(3-oxo-4,4-dimethylpentyl)-4-methylthiophene derivative (82%).
Deprotection
using Pd/C in EtOH/EtOAc provided the phenol (97%), which was alkylated with methylmercaptomethyl chloride (73%) and oxidized using m-CPBA to afford the 4-(methylsulfonylmethoxy)-3-methylphenyl derivative (33%).
Reduction
of the ketone using NaBH2 in MeOH yielded the alc. II (quant.). The preferred enantiomer of latter exhibited VDR activity in the RXR-VDR heterodimer assay (EC50 = 40.57 nM) and showed osteoporosis inhibition activity in the osteocalcin (OCN) promoter assay (EC50 = 46.82 nM), while demonstrating low toxicity in the mouse hypercalcemia assay (EC50 = >1000 nM). In addition, results from the keratinocyte proliferation assay (IC50 =
76 nM) and the IL-10 induction assay (IC50 = 26 nM) indicated that the preferred enantiomer of II may also be useful for the treatment of psoriasis, abscesses, and adhesions.
IT 633341-19-2P 633341-20-5P 633341-21-6P
633341-22-7P 633341-23-8P 633341-24-9P
633341-25-0P 633341-26-1P 633341-27-2P
633341-28-3P 633341-29-4P 633341-30-7P
633341-31-8P 633341-32-9P 633341-33-0P
633341-34-1P 633341-35-2P 633341-36-3P
633344-85-1P 633344-86-2P 633344-87-3P
633344-88-4P 633344-89-5P 633344-90-8P
633344-91-9P 633344-92-0P 633344-93-1P
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633350-14-8P 633350-15-9P 633350-16-0P
633350-17-1P 633350-18-2P 633350-19-3P
633350-20-6P 633350-21-7P 633350-22-8P
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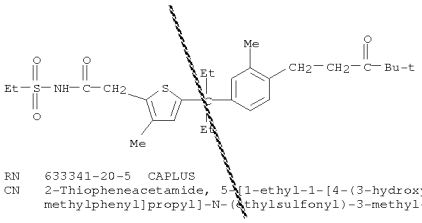
633350-26-2P 633350-27-3P 633350-28-4P
633350-29-5P 633350-30-8P 633350-31-9P

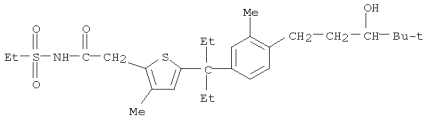
L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

633353-96-5P 633353-97-6P 633353-98-7P
633353-99-8P 633354-00-4P 633354-01-5P
633354-02-6P 633354-03-7P 633354-04-8P
633354-05-9P 633354-06-0P 633354-07-1P
633354-08-2P 633354-09-3P 633354-10-6P
633354-11-7P 633354-12-8P 633354-13-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(VDR modulator; prepn. of (phenylalkyl)thiophenes as VDR modulators for
preventing or treating damage to human skin cells by chem. vesicants)

RN 633341-19-2 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-[4-(4,4-dimethyl-3-oxopentyl)-3-methylphenyl]-1-ethylpropyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

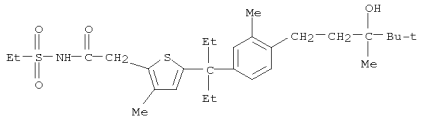


RN 633341-20-5 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-hydroxy-4,4-dimethylpentyl)-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

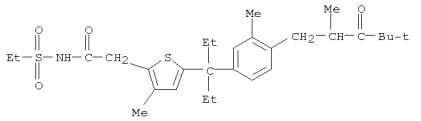


RN 633341-21-6 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-hydroxy-3,4,4-trimethylpentyl)-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

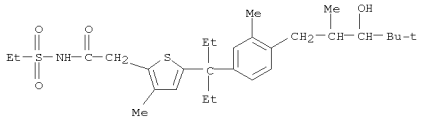
L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633341-22-7 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[3-methyl-4-(2,4,4-trimethyl-3-oxopentyl)phenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

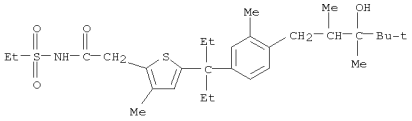


RN 633341-23-8 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-hydroxy-2,4,4-trimethylpentyl)-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

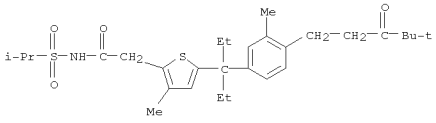


RN 633341-24-9 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-hydroxy-2,3,4,4-tetramethylpentyl)-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

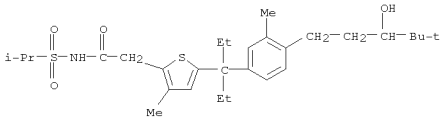
L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633341-25-0 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-[4-(4,4-dimethyl-3-oxopentyl)-3-methylphenyl]-1-ethylpropyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

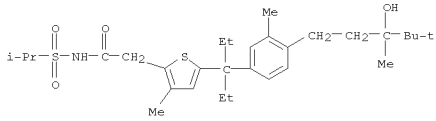


RN 633341-26-1 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-hydroxy-4,4-dimethylpentyl)-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

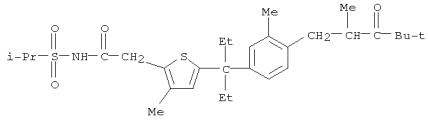


RN 633341-27-2 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-hydroxy-3,4,4-trimethylpentyl)-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

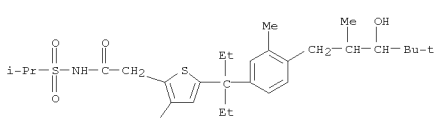
L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633341-28-3 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[3-methyl-4-(2,4,4-trimethyl-3-oxopentyl)phenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

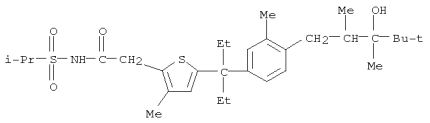


RN 633341-29-4 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-hydroxy-2,4,4-trimethylpentyl)-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

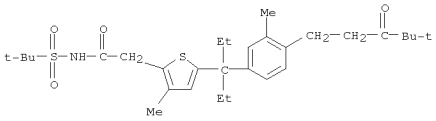


RN 633341-30-7 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-hydroxy-2,3,4,4-tetramethylpentyl)-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

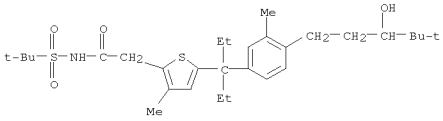
L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633341-31-8 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-[4-(4,4-dimethyl-3-oxopentyl)-3-methylphenyl]-1-ethylpropyl]-3-methyl- (CA INDEX NAME)

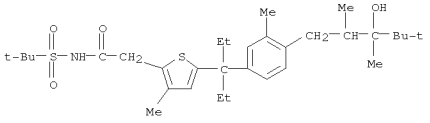


RN 633341-32-9 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-(3-hydroxy-4,4-dimethylpentyl)-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)

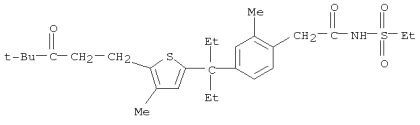


RN 633341-33-0 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-(3-hydroxy-3,4,4-trimethylpentyl)-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)

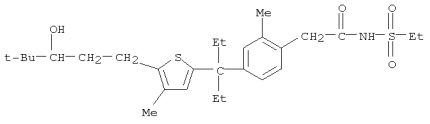
L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



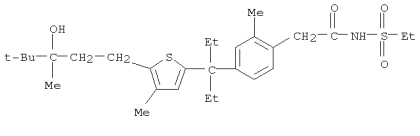
RN 633344-85-1 CAPLUS
CN Benzeneacetamide, 4-[1-[5-(4,4-dimethyl-3-oxopentyl)-4-methyl-2-thienyl]-1-ethylpropyl]-N-(ethylsulfonyl)-2-methyl- (CA INDEX NAME)



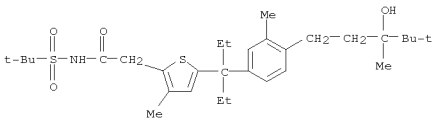
RN 633344-86-2 CAPLUS
CN Benzeneacetamide, 4-[1-ethyl-1-[5-(3-hydroxy-4,4-dimethylpentyl)-4-methyl-2-thienyl]propyl]-N-(ethylsulfonyl)-2-methyl- (CA INDEX NAME)



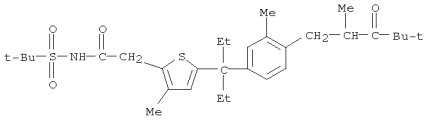
RN 633344-87-3 CAPLUS
CN Benzeneacetamide, 4-[1-ethyl-1-[5-(3-hydroxy-3,4,4-trimethylpentyl)-4-methyl-2-thienyl]propyl]-N-(ethylsulfonyl)-2-methyl- (CA INDEX NAME)



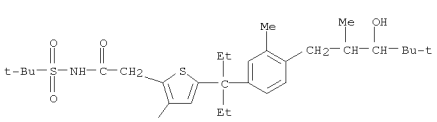
L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633341-34-1 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[3-methyl-4-(2,4,4-trimethyl-3-oxopentyl)phenyl]propyl]-3-methyl- (CA INDEX NAME)



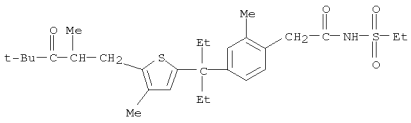
RN 633341-35-2 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-(3-hydroxy-2,4,4-trimethylpentyl)-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)



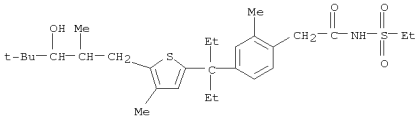
RN 633341-36-3 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-(3-hydroxy-2,3,4,4-tetramethylpentyl)-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)

L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

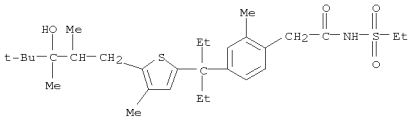
RN 633344-88-4 CAPLUS
CN Benzeneacetamide, 4-[1-ethyl-1-[4-methyl-5-(2,4,4-trimethyl-3-oxopentyl)-2-thienyl]propyl]-N-(ethylsulfonyl)-2-methyl- (CA INDEX NAME)



RN 633344-89-5 CAPLUS
CN Benzeneacetamide, 4-[1-ethyl-1-[5-(3-hydroxy-2,4,4-trimethylpentyl)-4-methyl-2-thienyl]propyl]-N-(ethylsulfonyl)-2-methyl- (CA INDEX NAME)

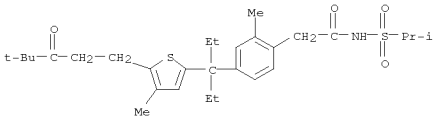


RN 633344-90-8 CAPLUS
CN Benzeneacetamide, 4-[1-ethyl-1-[5-(3-hydroxy-2,3,4,4-tetramethylpentyl)-4-methyl-2-thienyl]propyl]-N-(ethylsulfonyl)-2-methyl- (CA INDEX NAME)

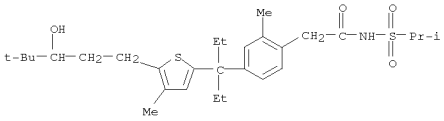


RN 633344-91-9 CAPLUS
CN Benzeneacetamide, 4-[1-[5-(4,4-dimethyl-3-oxopentyl)-4-methyl-2-thienyl]-1-ethylpropyl]-2-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

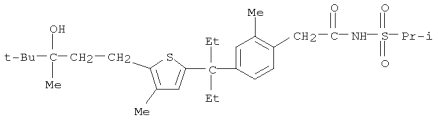
L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633344-92-0 CAPLUS
CN Benzeneacetamide, 4-[1-ethyl-1-[5-(3-hydroxy-4,4-dimethylpentyl)-4-methyl-2-thienyl]propyl]-2-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

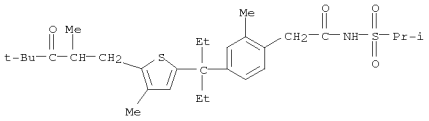


RN 633344-93-1 CAPLUS
CN Benzeneacetamide, 4-[1-ethyl-1-[5-(3-hydroxy-3,4,4-trimethylpentyl)-4-methyl-2-thienyl]propyl]-2-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

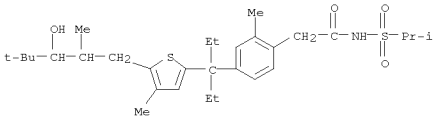


RN 633344-94-2 CAPLUS
CN Benzeneacetamide, 4-[1-ethyl-1-[4-methyl-5-(2,4,4-trimethyl-3-oxopentyl)-2-thienyl]propyl]-2-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

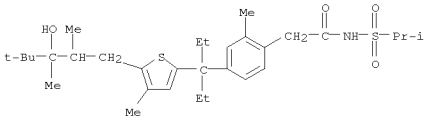
L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633344-95-3 CAPLUS
CN Benzeneacetamide, 4-[1-ethyl-1-[5-(3-hydroxy-2,4,4-trimethylpentyl)-4-methyl-2-thienyl]propyl]-2-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

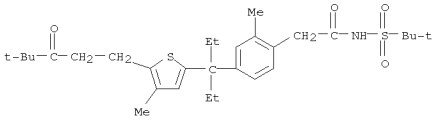


RN 633344-96-4 CAPLUS
CN Benzeneacetamide, 4-[1-ethyl-1-[5-(3-hydroxy-2,3,4,4-tetramethylpentyl)-4-methyl-2-thienyl]propyl]-2-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

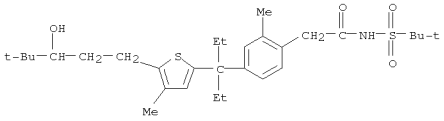


RN 633344-97-5 CAPLUS
CN Benzeneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-4-[1-[5-(4,4-dimethyl-3-oxopentyl)-4-methyl-2-thienyl]-1-ethylpropyl]-2-methyl- (CA INDEX NAME)

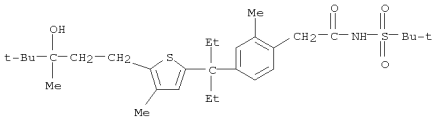
L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633344-98-6 CAPLUS
CN Benzeneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-4-[1-ethyl-1-[5-(3-hydroxy-4,4-dimethylpentyl)-4-methyl-2-thienyl]propyl]-2-methyl- (CA INDEX NAME)

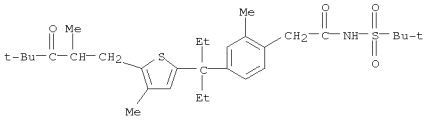


RN 633344-99-7 CAPLUS
CN Benzeneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-4-[1-ethyl-1-[5-(3-hydroxy-3,4,4-trimethylpentyl)-4-methyl-2-thienyl]propyl]-2-methyl- (CA INDEX NAME)

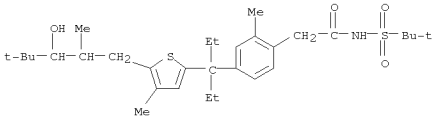


RN 633345-00-3 CAPLUS
CN Benzeneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-4-[1-ethyl-1-[4-methyl-5-(2,4,4-trimethyl-3-oxopentyl)-2-thienyl]propyl]-2-methyl- (CA INDEX NAME)

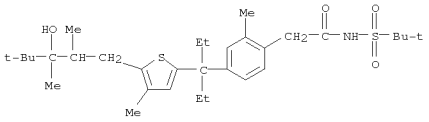
L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



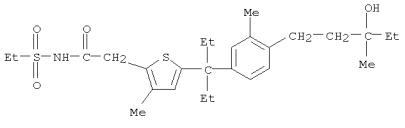
RN 633345-01-4 CAPLUS
CN Benzeneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-4-[1-ethyl-1-[5-(3-hydroxy-2,4,4-trimethylpentyl)-4-methyl-2-thienyl]propyl]-2-methyl- (CA INDEX NAME)



RN 633345-02-5 CAPLUS
CN Benzeneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-4-[1-ethyl-1-[5-(3-hydroxy-2,3,4,4-tetramethylpentyl)-4-methyl-2-thienyl]propyl]-2-methyl- (CA INDEX NAME)

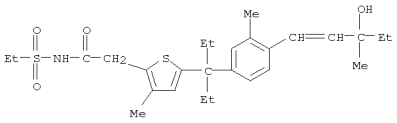


RN 633350-14-8 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-hydroxy-3-methylpentyl)-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

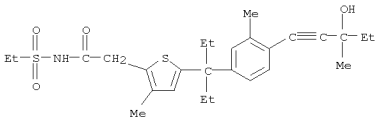


L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

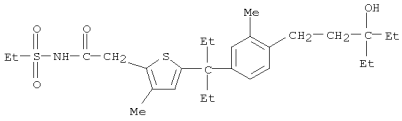
RN 633350-15-9 CAPLUS
CN 2-Thiopheneacetamide,
5-[1-ethyl-1-[4-(3-hydroxy-3-methyl-1-penten-1-yl)-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)



RN 633350-16-0 CAPLUS
CN 2-Thiopheneacetamide,
5-[1-ethyl-1-[4-(3-hydroxy-3-methyl-1-pentyn-1-yl)-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

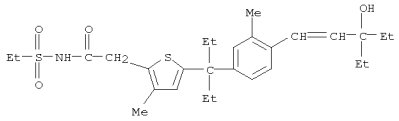


RN 633350-17-1 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-ethyl-3-hydroxypentyl)-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

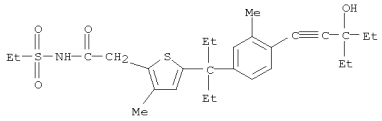


RN 633350-18-2 CAPLUS
CN 2-Thiopheneacetamide,
5-[1-ethyl-1-[4-(3-ethyl-3-hydroxy-1-penten-1-yl)-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

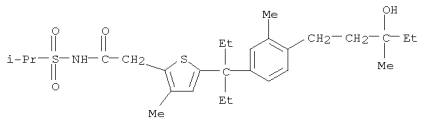
L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633350-19-3 CAPLUS
CN 2-Thiopheneacetamide,
5-[1-ethyl-1-[4-(3-ethyl-3-hydroxy-1-pentyn-1-yl)-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

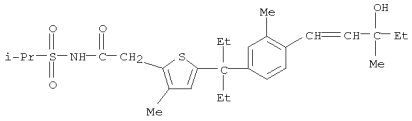


RN 633350-20-6 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-hydroxy-3-methylpentyl)-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

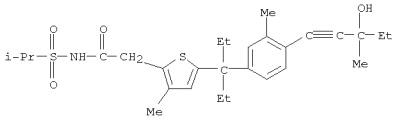


RN 633350-21-7 CAPLUS
CN 2-Thiopheneacetamide,
5-[1-ethyl-1-[4-(3-hydroxy-3-methyl-1-penten-1-yl)-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

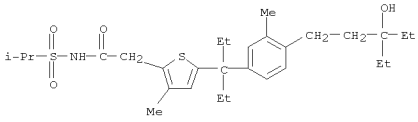
L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633350-22-8 CAPLUS
CN 2-Thiopheneacetamide,
5-[1-ethyl-1-[4-(3-hydroxy-3-methyl-1-pentyn-1-yl)-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

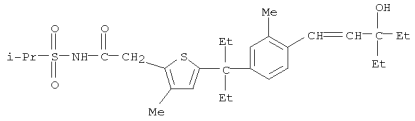


RN 633350-23-9 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-ethyl-3-hydroxypentyl)-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

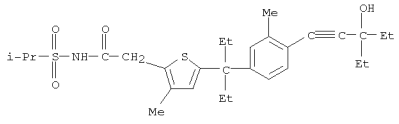


RN 633350-24-0 CAPLUS
CN 2-Thiopheneacetamide,
5-[1-ethyl-1-[4-(3-ethyl-3-hydroxy-1-penten-1-yl)-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

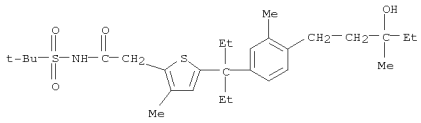
L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



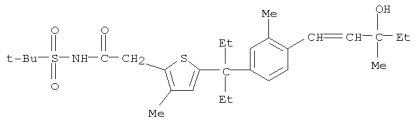
RN 633350-25-1 CAPLUS
CN 2-Thiopheneacetamide,
5-[1-ethyl-1-[4-(3-ethyl-3-hydroxy-1-pentyn-1-yl)-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)



RN 633350-26-2 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-(3-hydroxy-3-methylpentyl)-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)

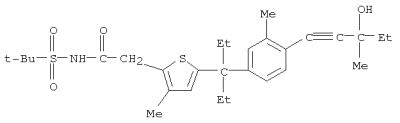


RN 633350-27-3 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-(3-hydroxy-3-methyl-1-penten-1-yl)-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)

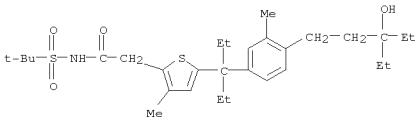


L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

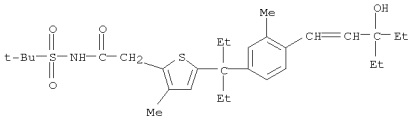
RN 633350-28-4 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-(3-hydroxy-3-methyl-1-pentyn-1-yl)-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)



RN 633350-29-5 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-(3-ethyl-3-hydroxypentyl)-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)

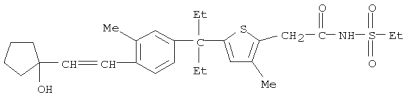


RN 633350-30-8 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-(3-ethyl-3-hydroxy-1-penten-1-yl)-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)

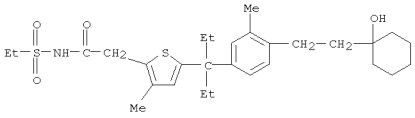


RN 633350-31-9 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-(3-ethyl-3-hydroxy-1-pentyn-1-yl)-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)

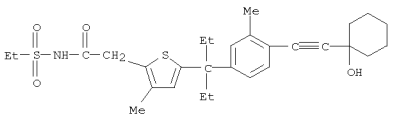
L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



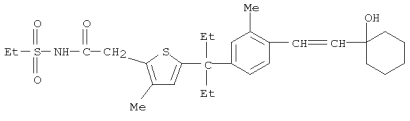
RN 633353-99-8 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclohexyl)ethyl]-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)



RN 633354-00-4 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclohexyl)ethynyl]-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

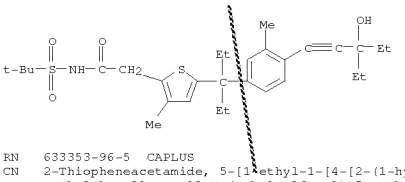


RN 633354-01-5 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclohexyl)ethenyl]-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

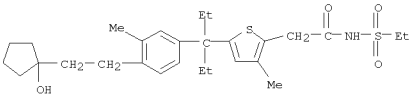


RN 633354-02-6 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclopentyl)ethyl]-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX

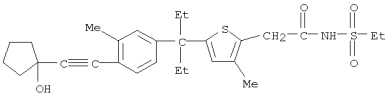
L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633353-96-5 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclopentyl)ethyl]-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

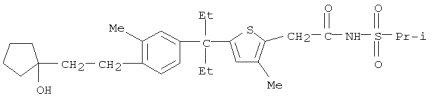


RN 633353-97-6 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclopentyl)ethynyl]-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

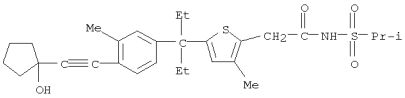


RN 633353-98-7 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclopentyl)ethenyl]-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

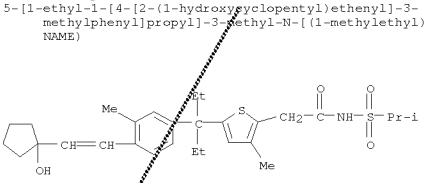
L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633354-03-7 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclopentyl)ethynyl]-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

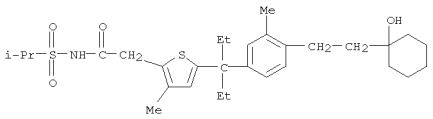


RN 633354-04-8 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclopentyl)ethenyl]-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

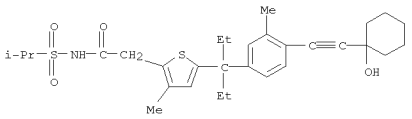


RN 633354-05-9 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclohexyl)ethyl]-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

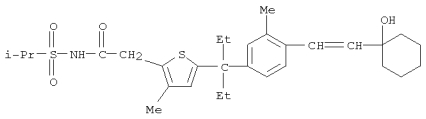
L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633354-06-0 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclohexyl)ethynyl]-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

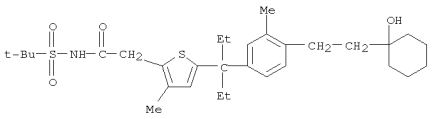


RN 633354-07-1 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclohexyl)ethenyl]-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

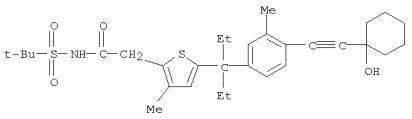


RN 633354-08-2 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-[2-(1-hydroxycyclopentyl)ethyl]-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)

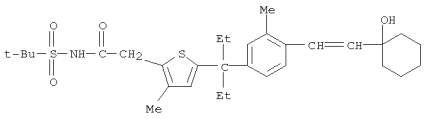
L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633354-12-8 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-[2-(1-hydroxycyclohexyl)ethynyl]-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)

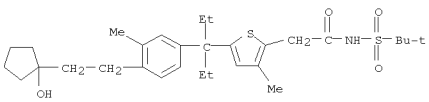


RN 633354-13-9 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-[2-(1-hydroxycyclohexyl)ethenyl]-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)

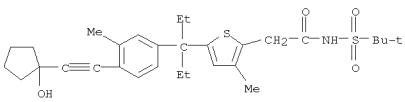


OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

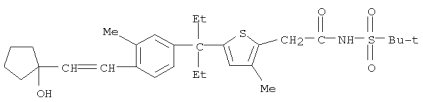
L7 ANSWER 3 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633354-09-3 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-[2-(1-hydroxycyclopentyl)ethynyl]-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)



RN 633354-10-6 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-[2-(1-hydroxycyclopentyl)ethenyl]-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)



RN 633354-11-7 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-[2-(1-hydroxycyclohexyl)ethyl]-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)

L7 ANSWER 4 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:392321 CAPLUS
DOCUMENT NUMBER: 140:406826
TITLE: Preparation of N-benzylpiperazine derivatives as chemokine receptor CCR1 antagonists useful as immunomodulatory agents
INVENTOR(S): Blumberg, Laura C.; Brown, Matthew F.; Gaweco, Anderson S.; Gladue, Ronald P.; Hayward, Matthew M.; Lundquist, Gregory D.; Poss, Christopher S.; Shavnya, Andrei
PATENT ASSIGNEE(S): Pfizer Inc, USA
SOURCE: U.S. Pat. Appl. Publ., 58 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040092529	A1	20040513	US 2003-686993	20031016
PRIORITY APPLN. INFO.:			US 2002-422590P P	20021030
OTHER SOURCE(S):	MARPAT 140:406826			

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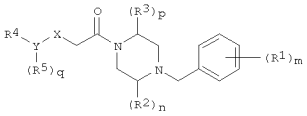


I

AB The present invention relates to compds. of the formula (I) and the pharmaceutically acceptable forms thereof [m = 0-5; n, p = 0-2; q = 0-4; X = O, S, CH2, (un)substituted NH; Y = C6-10 aryl, C2-9 heteroaryl; R1 = H, HO, halo, C1-8 alkyl, C1-8 alkoxy, HO-C1-8 alkyl, cyano, NH2, H2N-C1-8 alkyl, CO2H, C1-8 alkyl-CO, C1-8 alkyl-CO-C1-8 alkyl, CONH2, or H2NCO-C1-8 alkyl; R2, R3 = H, oxo, C1-8 alkyl, C3-8 cycloalkyl-C1-8 alkyl, C6-10 aryl, C6-10 aryl-C1-8 alkyl, HO-C1-8 alkyl, C1-8 alkyl-O-C1-8 alkyl, H2N-C1-8 alkyl, C1-8 alkyl-NH-C1-8 alkyl, (C1-8 alkyl)2N-C1-8 alkyl, C2-9 heterocyclyl-C1-8 alkyl, C3-8 cycloalkyl-NH-C1-8 alkyl, C1-8 alkyl-CO-NH-C1-8 alkyl-O-CO-NH-C1-8 alkyl, H2NCO-NH-C1-8 alkyl, C1-8 alkyl-SO2NH-C1-8 alkyl, C2-9 heteroaryl-C1-8 alkyl, H2NCO, H2NCO-C1-8 alkyl; R4 = (HO2C)(H2N)-C1-8 alkyl, (HO2C)[(C1-8 alkyl)NH]-C1-8 alkyl, (HO2C)[(C1-8 alkyl)2N]-C1-8 alkyl, (HO2C-C1-8 alkyl)(C1-8 alkyl)N, (HO2C-C1-8 alkyl)(C1-8 alkyl)N-C1-8 alkyl, (HO2C-C1-8 alkyl)(C1-8 alkyl-SO2)N, (HO2C-C1-8 alkyl)(C1-8 alkyl-SO2)N-C1-8 alkyl, (HO2C-C1-8 alkyl)(C1-8 alkyl-CO)N, etc.; R5 = H, HO, halo, cyano, CO2H, H2N, C1-8 alkyl-NH, (C1-8 alkyl)2N, C1-8 alkyl, C1-8 alkyl-O, HO-C1-8 alkyl, C1-8 alkyl-NH-C1-8 alkyl, (C1-8 alkyl)2N-C1-8 alkyl, etc.]. Moreover, the

L7 ANSWER 4 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
present invention is also directed at pharmaceutical compns. comprising the compd. I and a pharmaceutically acceptable carrier. Furthermore, the present invention is directed at methods of using the herein described compds. and compns. for treating or preventing a disorder or condition that can be treated or prevented by antagonizing the CCR1 receptor in a mammal. Particularly, disclosed is a method of treating or preventing a disorder or condition selected from the group consisting of fibrosis, Alzheimer's disease, conditions assocd. with leptin prodn., sequelae assocd. with cancer, cancer metastasis, diseases or conditions related to prodn. of cytokines at inflammatory sites, and tissue damage caused by inflammation induced by infectious agents, wherein the method comprises administering to a mammal in need of such treatment or prevention a pharmaceutically effective amt. of the compd. I or a pharmaceutically acceptable form thereof. The compds. I are potent and selective inhibitors of MIP-1α (CCL3) binding to its receptor CCR1 found on inflammatory and immunomodulatory cells (preferably leukocytes and lymphocytes). [2-[3-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-3-oxopropyl]-5-methylphenoxy]acetic acid was condensed with methanesulfonamide in CH2Cl2 at room temp. for 18 h using 4-dimethylaminopyridine and 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride to give N-[[2-[3-[4-(4-fluoro-benzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-3-oxo-propyl]-5-methylphenoxy]acetyl]methanesulfonamide. All the compds. I inhibited MIP-1α (and the related chemokines shown to interact with CCR1) induced chemotaxis of THP-1 cells and human leukocytes with IC50 of <10 μM.

IT 519172-07-7P, N-[[5-Chloro-2-[2-[4-(4-Fluoro-Benzyl)-(2R,5S)-2,5-Dimethyl-Piperazin-1-yl]-2-Oxo-Ethoxy]-Phenyl]-Acetyl]-Methanesulfonamide
519172-37-3P, N-[[5-Chloro-2-[2-[4-(4-Fluoro-Benzyl)-(2R,5S)-2,5-Dimethyl-Piperazin-1-yl]-2-Oxo-Ethoxy]-Pyridin-3-yl]-Acetyl]-Methanesulfonamide 519173-91-2P,

N-[[5-Bromo-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519173-92-3P,
N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)piperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519173-93-4P,

N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]-trifluoromethanesulfonamide
519173-94-5P 519173-95-6P,
N-[[2-[2-[4-(4-Fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]-4-methoxyphenyl]acetyl]methanesulfonamide
519173-96-7P 519173-97-8P,

N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]-2-methylbenzenesulfonamide
519173-98-9P, Ethanesulfonic acid

N-[[5-chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]amide 519174-00-6P,
N-[[5-Bromo-2-[2-[4-(4-fluorobenzyl)piperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-01-7P,
(R)-N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)-2-methylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-02-8P,

L7 ANSWER 4 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(R)-N-[[5-Bromo-2-[2-[4-(4-fluorobenzyl)-2-methylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-03-9P,

N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]-4-methoxybenzenesulfonamide
519174-04-0P, 2-Chloro-N-[[5-chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]benzenesulfonamide 519174-05-1P,

N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]-2-fluorobenzenesulfonamide
519174-06-2P, N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]-4-methylbenzenesulfonamide 519174-07-3P, Propane-2-sulfonic acid

[[5-chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]amide 519174-08-4P, Propane-1-sulfonic acid [[5-chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]amide 519174-11-9P,

N-[[4-Chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-12-0P,
(R)-N-[[4-Chloro-2-[2-[4-(4-fluorobenzyl)-2-methylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-13-1P,

N-[[5-Chloro-2-[2-[4-(3,4-difluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-14-2P,

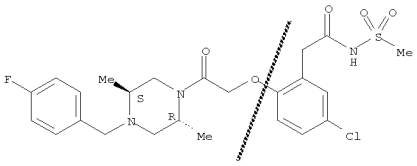
N-[[5-Chloro-2-[2-[4-(4-chlorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-16-4P,

N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]phenylmethanesulfonamide 519174-18-6P
, (R)-N-[[5-Chloro-2-[2-[4-(4-chlorobenzyl)-2-methylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-19-7P,
(R)-N-[[5-Chloro-2-[2-[4-(3,4-difluorobenzyl)-2-methylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-20-0P,
(R)-N-[[5-Chloro-2-[2-[2-ethyl-4-(4-fluorobenzyl)piperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-21-1P,
(R)-N-[[5-Bromo-2-[2-[2-ethyl-4-(4-fluorobenzyl)piperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-22-2P,
(R)-N-[[2-[2-[2-Ethyl-4-(4-fluorobenzyl)piperazin-1-yl]-2-oxo-ethoxy]-5-methylphenyl]acetyl]methanesulfonamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of N-benzylpiperazine derivs. as chemokine receptor CCR1 antagonists useful as immunomodulatory agents)

RN 519172-07-7 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

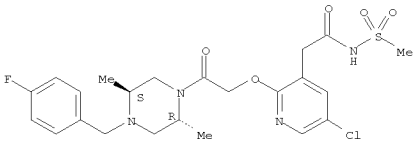
Absolute stereochemistry.

L7 ANSWER 4 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



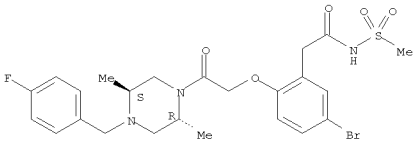
RN 519172-37-3 CAPLUS
CN 3-Pyridineacetamide,
5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



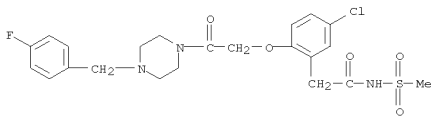
RN 519173-91-2 CAPLUS
CN Benzeneacetamide, 5-bromo-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



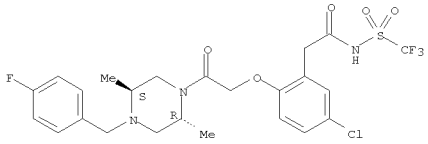
RN 519173-92-3 CAPLUS
CN Benzeneacetamide,
5-chloro-2-[2-[4-[(4-fluorophenyl)methyl]-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

L7 ANSWER 4 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



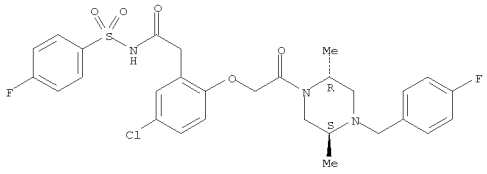
RN 519173-93-4 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(trifluoromethyl)sulfonyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 519173-94-5 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(4-fluorophenyl)sulfonyl]- (CA INDEX NAME)

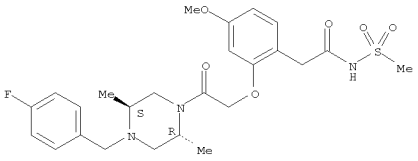
Absolute stereochemistry.



RN 519173-95-6 CAPLUS
CN Benzeneacetamide,
2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-4-methoxy-N-(methylsulfonyl)- (CA INDEX NAME)

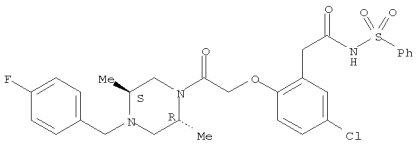
Absolute stereochemistry.

L7 ANSWER 4 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



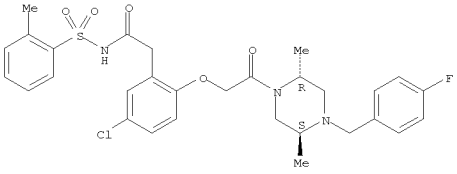
RN 519173-96-7 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(phenylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



RN 519173-97-8 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(2-methylphenyl)sulfonyl]- (CA INDEX NAME)

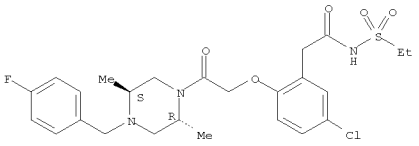
Absolute stereochemistry.



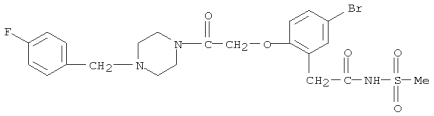
RN 519173-98-9 CAPLUS
CN Benzeneacetamide, 5-chloro-N-(ethylsulfonyl)-2-[2-[(2R,5S)-4-[(4-

L7 ANSWER 4 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]- (CA INDEX NAME)

Absolute stereochemistry.

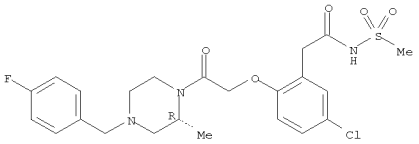


RN 519174-00-6 CAPLUS
CN Benzeneacetamide, 5-bromo-2-[2-[4-[(4-fluorophenyl)methyl]-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)



RN 519174-01-7 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R)-4-[(4-fluorophenyl)methyl]-2-methyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

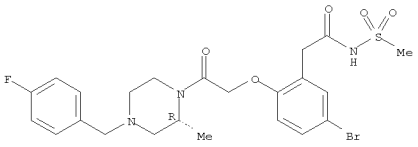
Absolute stereochemistry.



RN 519174-02-8 CAPLUS
CN Benzeneacetamide, 5-bromo-2-[2-[(2R)-4-[(4-fluorophenyl)methyl]-2-methyl-1-

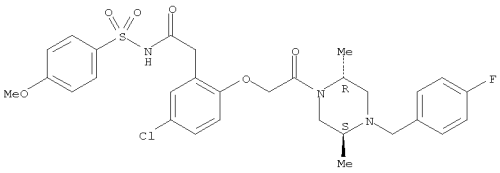
L7 ANSWER 4 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



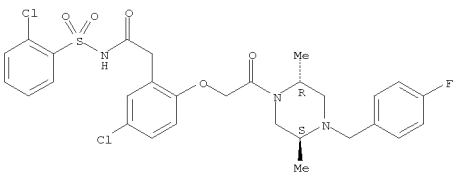
RN 519174-03-9 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(4-methoxyphenyl)sulfonyl]- (CA INDEX NAME)

Absolute stereochemistry.



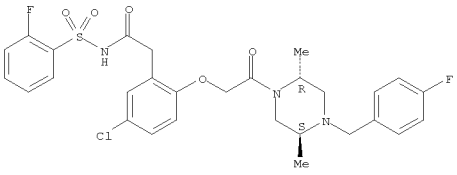
RN 519174-04-0 CAPLUS
CN Benzeneacetamide, 5-chloro-N-[(2-chlorophenyl)sulfonyl]-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]- (CA INDEX NAME)

Absolute stereochemistry.



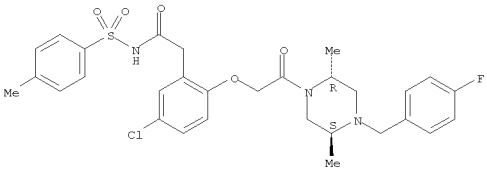
L7 ANSWER 4 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RN 519174-05-1 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(2-fluorophenyl)sulfonyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 519174-06-2 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(4-methylphenyl)sulfonyl]- (CA INDEX NAME)

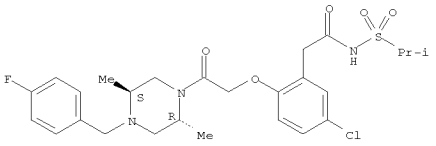
Absolute stereochemistry.



RN 519174-07-3 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

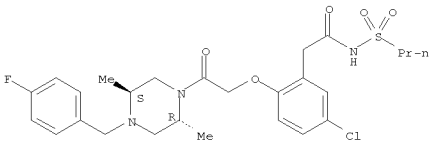
Absolute stereochemistry.

L7 ANSWER 4 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



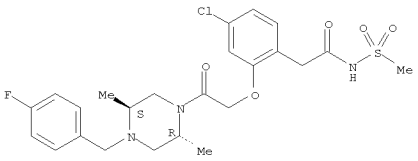
RN 519174-08-4 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(propylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



RN 519174-11-9 CAPLUS
CN Benzeneacetamide, 4-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

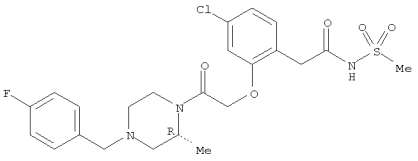
Absolute stereochemistry.



RN 519174-12-0 CAPLUS
CN Benzeneacetamide, 4-chloro-2-[2-[(2R)-4-[(4-fluorophenyl)methyl]-2-methyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

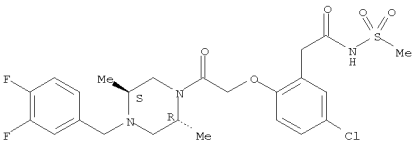
L7 ANSWER 4 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

Absolute stereochemistry.



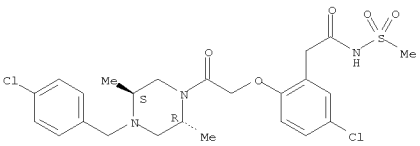
RN 519174-13-1 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(3,4-difluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



RN 519174-14-2 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-chlorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

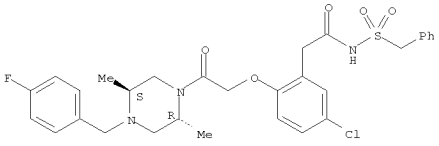
Absolute stereochemistry.



RN 519174-16-4 CAPLUS

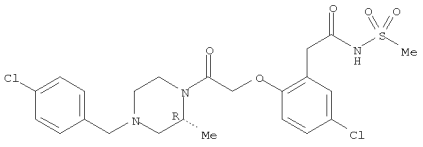
L7 ANSWER 4 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(phenylmethyl)sulfonyl]- (CA INDEX NAME)

Absolute stereochemistry.



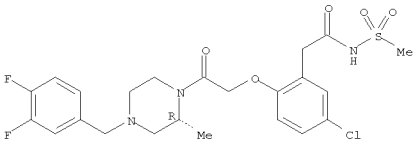
RN 519174-18-6 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R)-4-[(4-chlorophenyl)methyl]-2-methyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



RN 519174-19-7 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R)-4-[(3,4-difluorophenyl)methyl]-2-methyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

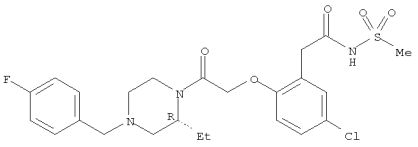
Absolute stereochemistry.



RN 519174-20-0 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R)-2-ethyl-4-[(4-fluorophenyl)methyl]-1-

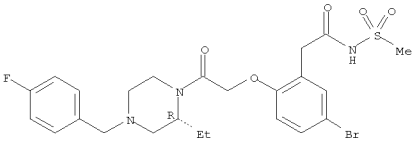
L7 ANSWER 4 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



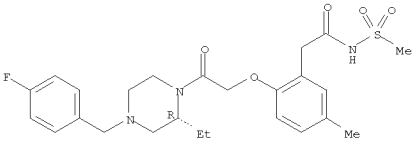
RN 519174-21-1 CAPLUS
CN Benzeneacetamide, 5-bromo-2-[2-[(2R)-2-ethyl-4-[(4-fluorophenyl)methyl]-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



RN 519174-22-2 CAPLUS
CN Benzeneacetamide, 2-[2-[(2R)-2-ethyl-4-[(4-fluorophenyl)methyl]-1-piperazinyl]-2-oxoethoxy]-5-methyl-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 5 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:387265 CAPLUS
DOCUMENT NUMBER: 140:391297
TITLE: Preparation of piperazine derivatives as CCR1 antagonists
INVENTOR(S): Blumberg, Laura Cook; Brown, Matthew Frank; Gaweco, Anderson See; Gladue, Ronald Paul; Hayward, Matthew Merrill; Lundquist, Gregory Dean; Poss, Christopher Stanley; Shavnya, Andre
PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: PCT Int. Appl., 131 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004039376	A1	20040513	WO 2003-IB4612	20031020

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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

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EP 1583533	A1	20051012	EP 2003-751145	20031020

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JP 2006506391	T	20060223	JP 2004-547876	20031020

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PRIORITY APPLN. INFO.:			US 2002-422590P	P 20021030

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			WO 2003-IB4612	W 20031020

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OTHER SOURCE(S): MARPAT 140:391297
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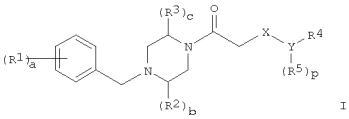
L7 ANSWER 5 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



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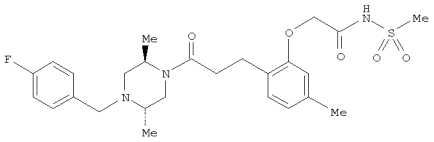


II

AB Title compds. I [a = 0-5; b,c = 0-2; p = 0-4; X = O, S, CH2, (un)substituted amino; Y = (hetero)aryl; R1 = H, OH, halo, alkyl, alkoxy, etc.; R2-3 = H, oxo, (cyclo)alkyl, aryl, etc.; R4 = alkyl, etc.; R5 = H, OH, halo, CN, etc.] are prepared For instance, (2R,5S)-1-(4-fluorobenzyl)-2,5-dimethylpiperazine (preparation given) is reacted with 7-methylchroman-2-one (PhMe, reflux 48 h), the resulting propanone treated with bromoacetic acid Me ester (THF, NaH) and the ester saponified to give II. All example compds. have IC50 < 10 μM in the chemotaxis assay. I are useful for treating or preventing a disorder or condition that can be treated or prevented by antagonizing the CCR1 receptor in a mammal.

IT 519172-07-7P, N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide
519172-37-3P, N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]pyridin-3-yl]acetyl]methanesulfonamide
519173-91-2P 519173-92-3P,
N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)piperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519173-93-4P
519173-94-5P 519173-95-6P 519173-96-7P
519173-97-8P 519173-98-9P 519174-00-6P,
N-[[5-Bromo-2-[2-[4-(4-fluorobenzyl)piperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-01-7P,
(R)-N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)-2-methylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-02-8P,
(R)-N-[[5-Bromo-2-[2-[4-(4-fluorobenzyl)-2-methylpiperazin-1-yl]-2-

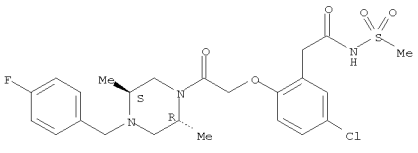
L7 ANSWER 5 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-03-9P
519174-04-0P 519174-05-1P 519174-06-2P
519174-07-3P, Propane-2-sulfonic acid

[[5-chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]amide 519174-08-4P
519174-11-9P 519174-12-0P,
(R)-N-[[4-Chloro-2-[2-[4-(4-fluorobenzyl)-2-methylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-13-1P
519174-14-2P 519174-16-4P 519174-18-6P,
(R)-N-[[5-Chloro-2-[2-[4-(4-chlorobenzyl)-2-methylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-19-7P,
(R)-N-[[5-Chloro-2-[2-[4-(3,4-difluorobenzyl)-2-methylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-20-0P,
(R)-N-[[5-Chloro-2-[2-[2-ethyl-4-(4-fluorobenzyl)piperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-21-1P,
(R)-N-[[5-Bromo-2-[2-[2-ethyl-4-(4-fluorobenzyl)piperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-22-2P,
(R)-N-[[2-[2-[2-Ethyl-4-(4-fluorobenzyl)piperazin-1-yl]-2-oxoethoxy]-5-methylphenyl]acetyl]methanesulfonamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of substituted N-acylpiperazine derivs. as CCR1 antagonists)

RN 519172-07-7 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

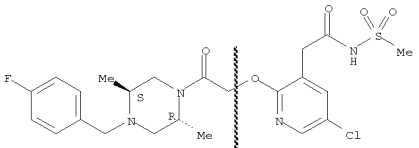
Absolute stereochemistry.



RN 519172-37-3 CAPLUS
CN 3-Pyridineacetamide,
5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

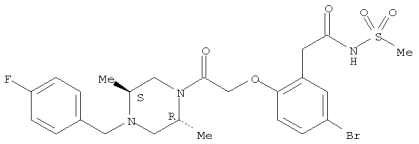
Absolute stereochemistry.

L7 ANSWER 5 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

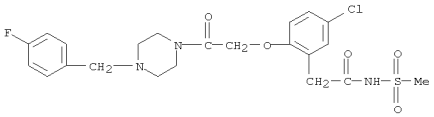


RN 519173-91-2 CAPLUS
CN Benzeneacetamide, 5-bromo-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



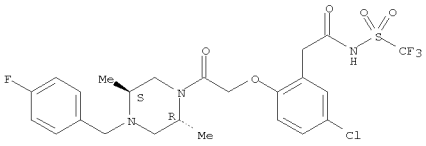
RN 519173-92-3 CAPLUS
CN Benzeneacetamide,
5-chloro-2-[2-[4-[(4-fluorophenyl)methyl]-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)



RN 519173-93-4 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(trifluoromethyl)sulfonyl]- (CA INDEX NAME)

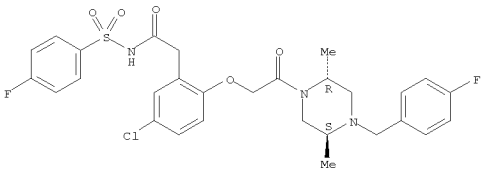
Absolute stereochemistry.

L7 ANSWER 5 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



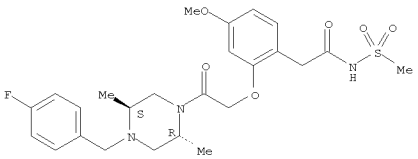
RN 519173-94-5 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(4-fluorophenyl)sulfonyl]- (CA INDEX NAME)

Absolute stereochemistry.

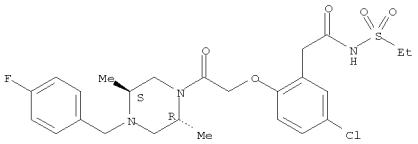


RN 519173-95-6 CAPLUS
CN Benzeneacetamide, 2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-4-methoxy-N-(methylsulfonyl)- (CA INDEX NAME)

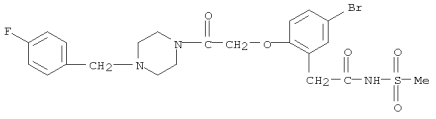
Absolute stereochemistry.



L7 ANSWER 5 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

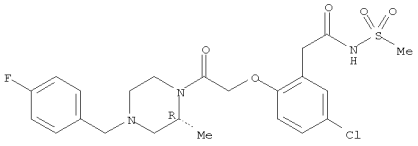


RN 519174-00-6 CAPLUS
CN Benzeneacetamide, 5-bromo-2-[2-[4-[(4-fluorophenyl)methyl]-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)



RN 519174-01-7 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R)-4-[(4-fluorophenyl)methyl]-2-methyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



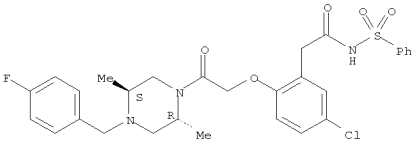
RN 519174-02-8 CAPLUS
CN Benzeneacetamide, 5-bromo-2-[2-[(2R)-4-[(4-fluorophenyl)methyl]-2-methyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 5 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

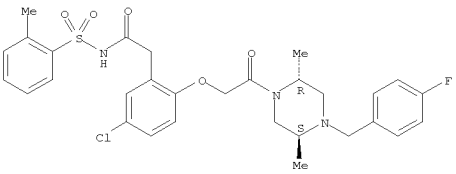
RN 519173-96-7 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(phenylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



RN 519173-97-8 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(2-methylphenyl)sulfonyl]- (CA INDEX NAME)

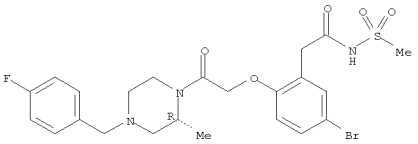
Absolute stereochemistry.



RN 519173-98-9 CAPLUS
CN Benzeneacetamide, 5-chloro-N-(ethylsulfonyl)-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]- (CA INDEX NAME)

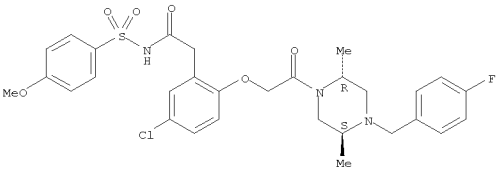
Absolute stereochemistry.

L7 ANSWER 5 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



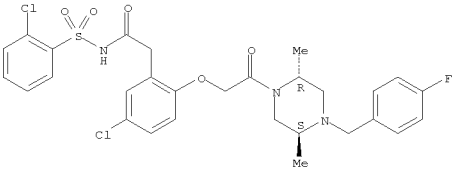
RN 519174-03-9 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(4-methoxyphenyl)sulfonyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 519174-04-0 CAPLUS
CN Benzeneacetamide, 5-chloro-N-[(2-chlorophenyl)sulfonyl]-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]- (CA INDEX NAME)

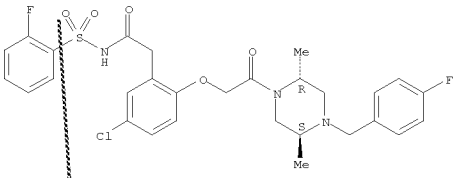
Absolute stereochemistry.



RN 519174-05-1 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(2-fluorophenyl)sulfonyl]- (CA

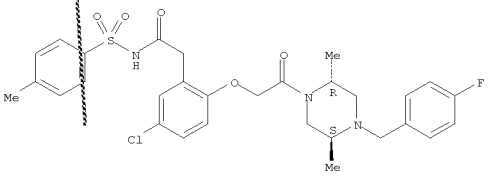
L7 ANSWER 5 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
INDEX NAME)

Absolute stereochemistry.



RN 519174-06-2 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(4-methylphenyl)sulfonyl]- (CA INDEX NAME)

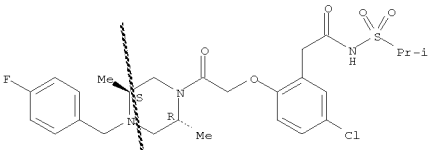
Absolute stereochemistry.



RN 519174-07-3 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

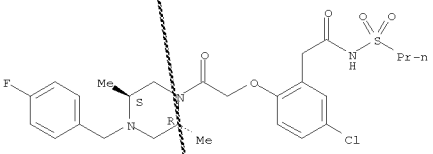
Absolute stereochemistry.

L7 ANSWER 5 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



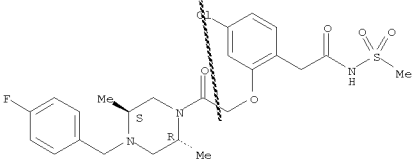
RN 519174-08-4 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(propylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



RN 519174-11-9 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

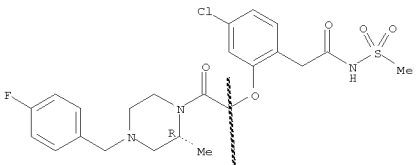
Absolute stereochemistry.



RN 519174-12-0 CAPLUS
CN Benzeneacetamide,
4-chloro-2-[2-[(2R)-4-[(4-fluorophenyl)methyl]-2-methyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

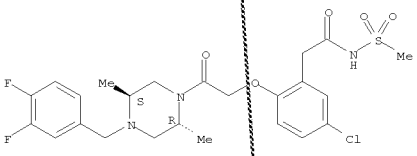
L7 ANSWER 5 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

Absolute stereochemistry.



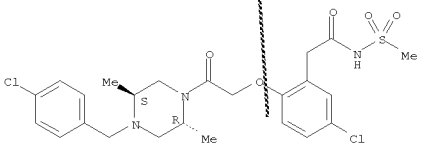
RN 519174-13-1 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(3,4-difluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



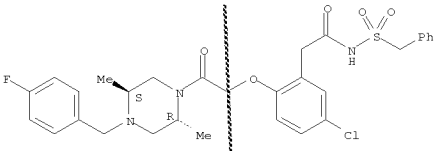
RN 519174-14-2 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-chlorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



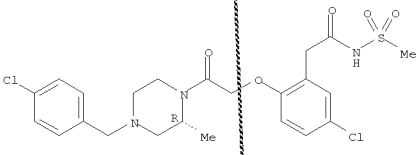
RN 519174-16-4 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(phenylmethyl)sulfonyl]- (CA INDEX NAME)

L7 ANSWER 5 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
Absolute stereochemistry.



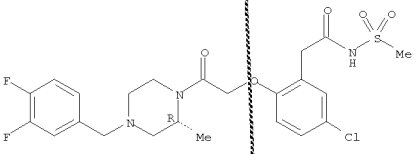
RN 519174-18-6 CAPLUS
CN Benzeneacetamide,
5-chloro-2-[2-[(2R)-4-[(4-chlorophenyl)methyl]-2-methyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



RN 519174-19-7 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R)-4-[(3,4-difluorophenyl)methyl]-2-methyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

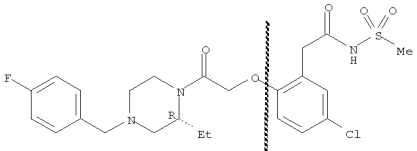
Absolute stereochemistry.



RN 519174-20-0 CAPLUS
CN Benzeneacetamide,
5-chloro-2-[2-[(2R)-2-ethyl-4-[(4-fluorophenyl)methyl]-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

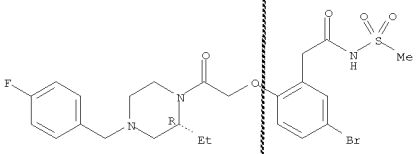
Absolute stereochemistry.

L7 ANSWER 5 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



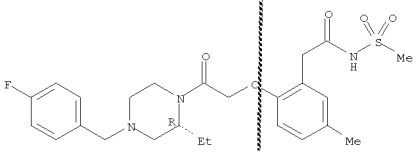
RN 519174-21-1 CAPLUS
CN Benzeneacetamide, 5-bromo-2-[2-[(2R)-2-ethyl-4-[(4-fluorophenyl)methyl]-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



RN 519174-22-2 CAPLUS
CN Benzeneacetamide, 2-[2-[(2R)-2-ethyl-4-[(4-fluorophenyl)methyl]-1-piperazinyl]-2-oxoethoxy]-5-methyl-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



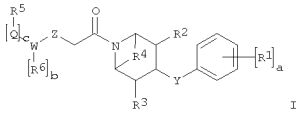
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 6 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:80685 CAPLUS
DOCUMENT NUMBER: 140:146011
TITLE: Preparation of bicyclic piperidine derivatives as antagonists of the CCR1 chemokine receptor
INVENTOR(S): Blumberg, Laura Cook; Brown, Matthew Frank; Hayward, Matthew Merrill; Poss, Christopher Stanley
PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: PCT Int. Appl., 90 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004009588	A1	20040129	WO 2003-IB3155	20030707
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2492110	A1	20040129	CA 2003-2492110	20030707
AU 2003281527	A1	20040209	AU 2003-281527	20030707
BR 2003012699	A	20050426	BR 2003-12699	20030707
EP 1525201	A1	20050427	EP 2003-741007	20030707
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1668614	A	20050914	CN 2003-817005	20030707
JP 2005533845	T	20051110	JP 2004-522638	20030707
US 20040063688	A1	20040401	US 2003-616843	20030708
IN 2004DN04155	A	20050401	IN 2004-DN4155	20041228
MX 2005000757	A	20050419	MX 2005-757	20050118

PRIORITY APPLN. INFO.: US 2002-397263P P 20020718
WO 2003-IB3155 W 20030707
OTHER SOURCE(S): MARPAT 140:146011
GI

L7 ANSWER 6 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



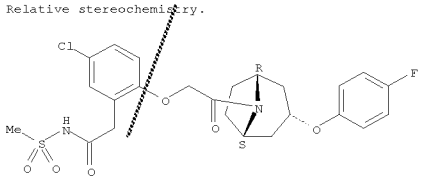
I

AB The title compds. [I; a = 1-5; b = 0-4; c = 0-1; Q = alkyl; W = aryl, heteroaryl; Y = O, NH, N(alkyl); Z = O, NH, N(alkyl), N(acetyl); R1 = H, halo, CN, NO2, etc.; R2, R3 = H, alkyl, haloalkyl; R4 = alkylene, (CH2)xO(CH2)y (wherein x, y = 1-2); R5 = H, halo, alkyl, etc.; R6 = H, halo, alkyl, etc.], useful as potent and selective inhibitors of MIP-1α(CCL3) binding to its receptor CCR1 found on inflammatory and immunomodulatory cells (preferably leukocytes and lymphocytes), were prepared E.g., a multi-step synthesis of (trans)-5-chloro-2-{2-[3-(4-fluorophenoxy)-8-aza-bicyclo[3.2.1]oct-8-yl]-2-oxoethoxy}benzamide was given. All exemplified compds. I had IC50 of <10 μM in the chemotaxis assay. Pharmaceutical composition comprising the compound I is claimed.

IT 652146-64-0P 652147-08-5P 652147-89-2P
653599-92-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of bicyclic piperidine derivs. as antagonists of the CCR1 chemokine receptor)

RN 652146-64-0 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(3-endo)-3-(4-fluorophenoxy)-8-azabicyclo[3.2.1]oct-8-yl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

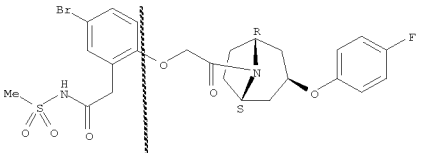
Relative stereochemistry.



RN 652147-08-5 CAPLUS
CN Benzeneacetamide, 5-bromo-2-[2-[(3-exo)-3-(4-fluorophenoxy)-8-azabicyclo[3.2.1]oct-8-yl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

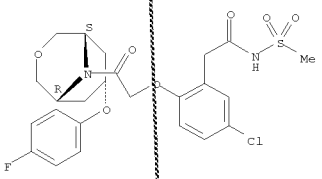
Relative stereochemistry.

L7 ANSWER 6 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



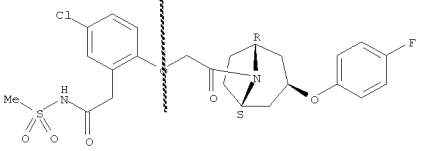
RN 652147-89-2 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(7-endo)-7-(4-fluorophenoxy)-3-oxa-9-azabicyclo[3.3.1]non-9-yl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Relative stereochemistry.



RN 653599-92-9 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(3-exo)-3-(4-fluorophenoxy)-8-azabicyclo[3.2.1]oct-8-yl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Relative stereochemistry.



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD

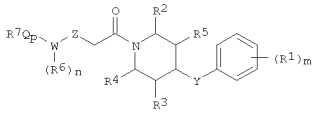
L7 ANSWER 6 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(5 CITINGS)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:80652 CAPLUS
DOCUMENT NUMBER: 140:146007
TITLE: Preparation of piperidinylketones as as selective inhibitors of macrophage inflammatory protein 1α (MIP-1α) binding to CCR1 chemokine receptors.
INVENTOR(S): Blumberg, Laura Cook; Brown, Matthew Frank; Hayward, Matthew Merrill; Poss, Christopher Stanley
PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: PCT Int. Appl., 62 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004009550	A1	20040129	WO 2003-IB2876	20030707
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2492651	A1	20040129	CA 2003-2492651	20030707
AU 2003242941	A1	20040209	AU 2003-242941	20030707
EP 1534677	A1	20050601	EP 2003-765230	20030707
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003012946	A	20050712	BR 2003-12946	20030707
CN 1668592	A	20050914	CN 2003-817092	20030707
JP 2005537279	T	20051208	JP 2004-522601	20030707
US 20040063759	A1	20040401	US 2003-616844	20030708
IN 2004DN04166	A	20070511	IN 2004-DN4166	20041229
ZA 2005000067	A	20051102	ZA 2005-67	20050104
MX 2005000380	A	20050331	MX 2005-380	20050106
PRIORITY APPLN. INFO.:			US 2002-397108P P	20020718
			WO 2003-IB2876 W	20030707

OTHER SOURCE(S): MARPAT 140:146007
GI

L7 ANSWER 7 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

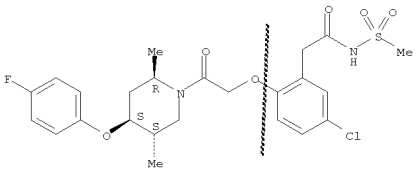


I

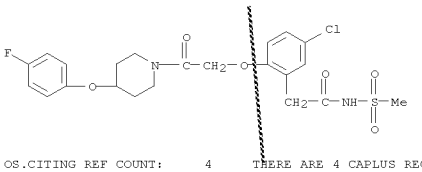
AB Title compds. [I; m = 1-5; n = 0-4; p = 0-1; Q = alkyl; W = aryl, heteroaryl; Y = O, NR8; R8 = H, alkyl; Z = O, NR9; R9 = H, alkyl, Ac; R1 = H, halo, cyano, NO2, CF3, OCF3, alkyl, OH, alkylcarbonyloxy, alkoxy; R2-R5 = H, (halo)alkyl; R6 = H, halo, (halo)alkyl, cyano, alkoxy, aminocarbonyl, carboxy, alkylcarbonyl, (halo)alkoxy; R7 = H, halo, (halo)alkyl, dialkylaminoalkylaminocarbonyl, alkoxy, aminocarbonyl, ureido, aminosulfonyl, alkylsulfonylaminoalkylamino, aminosulfonylamino, heteroaryloxy, ureidoalkylaminocarbonyl, etc.; ≥1 of R2-R5 = alkyl], were prepared Thus, 2-(2-amino-4-chlorophenoxy)-1-[4-(4-fluorophenoxy)piperidin-1-yl]ethanone (preparation given) in CH2Cl2 was treated with Et3N and Ph chloroformate, The reaction was stirred at ambient temperature for 4 h, concentrated in vacuo, and the resulting residue dissolved in methanol followed by bubbling in ammonia gas for 10 min and stirred overnight at ambient temperature to give [5-chloro-2-[2-[4-(4-fluorophenoxy)piperidin-1-yl]-2-oxoethoxy]phenyl]urea. I inhibited chemotaxis with IC50 <10 μM.
IT 651301-03-0P 651301-07-4P,
N-[[5-Chloro-2-[2-[4-(4-fluorophenoxy)piperidin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of piperidinylketones as as selective inhibitors of macrophage inflammatory protein 1α (MIP-1α) binding to CCR1 chemokine receptors)
RN 651301-03-0 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,4S,5S)-4-(4-fluorophenoxy)-2,5-dimethyl-1-piperidinyl]-2-oxoethoxy]-N-(methylsulfonyl)-, rel- (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 7 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 651301-07-4 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[4-(4-fluorophenoxy)-1-piperidinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
(4 CITINGS)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

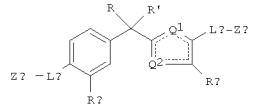
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2003:972066 CAPLUS
DOCUMENT NUMBER: 140:27753
TITLE: Preparation of phenylalkyl thiophene-type vitamin D receptor modulators for treating bone disease, psoriasis and other disorders
INVENTOR(S): Dahnke, Karl Robert; Gajewski, Robert Peter; Jones, Charles David; Linebarger, Jared Harris; Lu, Jianliang; Ma, Tianwei; Nagpal, Sunil; Simard, Todd Parker; Yee, Ying Kwong; Bunel, Emilio Enrique; Stites, Ryan Edward
PATENT ASSIGNEE(S): Eli Lilly and Company, USA
SOURCE: PCT Int. Appl., 504 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003101978	A1	20031211	WO 2003-US14539	20030522
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2485503	A1	20031211	CA 2003-2485503	20030522
AU 2003233505	A1	20031219	AU 2003-233505	20030522
AU 2003233505	B2	20090423		
BR 2003009983	A	20050222	BR 2003-9983	20030522
EP 1511740	A1	20050309	EP 2003-728782	20030522
EP 1511740	B1	20090708		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1656089	A	20050817	CN 2003-812198	20030522
CN 100471853	C	20090325		
JP 2005532348	T	20051027	JP 2004-509669	20030522
AT 435856	T	20090715	AT 2003-728782	20030522
ES 2327629	T3	20091102	ES 2003-728782	20030522
MX 2004011903	A	20050331	MX 2004-11903	20041129

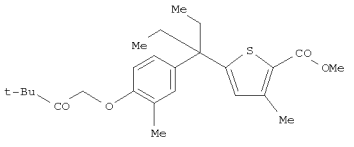
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

IN 2004KN01967	A	20061103	IN 2004-KN1967	20041221
US 20060287536	A1	20061221	US 2006-515403	20060125
US 7601850	B2	20091013		
PRIORITY APPLN. INFO.:			US 2002-384151P P	20020529
			WO 2003-US14539 W	20030522

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 140:27753
GI



I



II

AB The present invention relates to novel, nonsecosteroidal, phenylalkyl thiophene compds. (shown as I; variables defined below; e.g.

3'-[4-(2-oxo-3,3-dimethylbutoxy)-3-methylphenyl]-3'-[5-(methoxycarbonyl)-4-(methyl)thiophen-2-yl]pentane (II)) with vitamin D receptor (VDR) modulating activity that are less hypercalcemic than 1α,25 dihydroxy vitamin D3. These compds. are useful for treating bone disease and psoriasis. For I: R and R' = C1-C5 alkyl, C1-C5 fluoroalkyl, or together R and R' form a (un)substituted, (un)saturated carbocyclic ring having 3-8 C atoms; ring atoms Q1 and Q2 = C or S, with the proviso that one atom is S and the other atom is C; RP and RT = H, halo, C1-C5 alkyl, C1-C5 fluoroalkyl, -O-C1-C5 alkyl, -S-C1-C5 alkyl, -O-C1-C5 fluoroalkyl, -CN, -NO2, acetyl, -S-C1-C5 fluoroalkyl, C2-C5 alkenyl, C3-C5 cycloalkyl, and C3-C5 cycloalkenyl; LP and LT are divalent linking bond, -(CH2)mC(X1)-(X1 = O, S; m = 0-2), -(CH2)mCH(OH)-, etc.; ZP and ZT = H, Ph, benzyl, fluorophenyl, C1-C5 alkyl, etc.; addnl. details including provisos are given in the claims. Although the methods of preparation are not claimed, .apprx.180 example prepns. are included. For example, II was prepd. in 7 steps starting from 2-hydroxy-5-bromotoluene and tert-butyldimethylsilyl chloride and involving intermediates 2-(tert-Butyldimethylsilyloxy)-5-bromotoluene, 3'-[4-(tert-Butyldimethylsilyloxy)-3-methylphenyl]pentan-3-ol, 3'-[4-(Hydroxy)-3-methylphenyl]-3'-[4-(methyl)thiophen-2-yl]pentane, 3'-[4-(Benzyloxy)-3-methylphenyl]-3'-[4-(methyl)thiophen-2-yl]pentane, 3'-[4-(Benzyloxy)-3-methylphenyl]-3'-[5-(methoxycarbonyl)-4-(methyl)thiophen-2-yl]pentane, and

3'-[4-(Hydroxy)-3-methylphenyl]-3'-[5-(methoxycarbonyl)-4-(methyl)thiophen-2-yl]pentane with yields of 97, 72, 95, 92, 54, 100 and 85, resp.
Results are tabulated for many of the example I for the following assays: RXR-VDR heterodimerization (SaOS-2 cells), VDR co-transfection (Caco-2 cells), osteocalcin promotor, mouse hypercalcemia, keratinocyte proliferation, and IL-10 induction; e.g. one enantiomer of 1-[4-[1-ethyl-1-(5-hydroxymethyl-4-methylthiophen-2-yl)propyl]-2-methylphenoxy]-3,3-dimethylbutan-2-ol exhibits an EC50 = 2.8 nM in the RXR-VDR assay compared to 3 nM for the control calcipotriol.

IT 633341-19-2P 633341-20-5P 633341-21-6P
633341-22-7P 633341-23-8P 633341-24-9P
633341-25-0P 633341-26-1P 633341-27-2P
633341-28-3P 633341-29-4P 633341-30-7P
633341-31-8P 633341-32-9P 633341-33-0P
633341-34-1P 633341-35-2P 633341-36-3P
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633344-88-4P 633344-89-5P 633344-90-8P
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633344-94-2P 633344-95-3P 633344-96-4P
633344-97-5P 633344-98-6P 633344-99-7P
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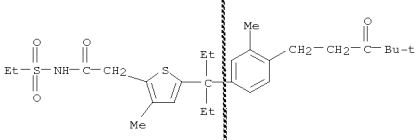
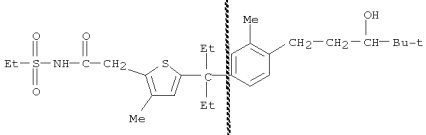
633350-26-2P 633350-27-3P 633350-28-4P
633350-29-5P 633350-30-8P 633350-31-9P
633353-96-5P 633353-97-6P 633353-98-7P
633353-99-8P 633354-00-4P 633354-01-5P
633354-02-6P 633354-03-7P 633354-04-8P
633354-05-9P 633354-06-0P 633354-07-1P
633354-08-2P 633354-09-3P 633354-10-6P
633354-11-7P 633354-12-8P 633354-13-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of phenylalkyl thiophene-type vitamin D receptor modulators for treating bone disease, psoriasis and other disorders)

RN 633341-19-2 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-[4-(4,4-dimethyl-3-oxopentyl)-3-methylphenyl]-1-ethylpropyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

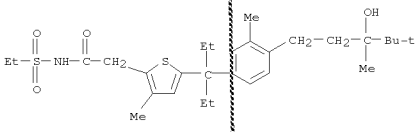
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633341-20-5 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-hydroxy-4,4-dimethylpentyl)-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

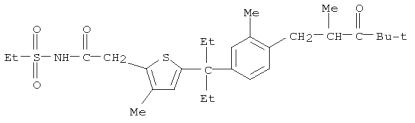


RN 633341-21-6 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-hydroxy-3,4,4-trimethylpentyl)-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

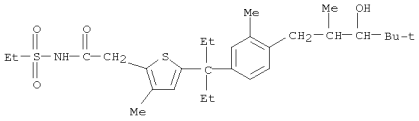


RN 633341-22-7 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[3-methyl-4-(2,4,4-trimethyl-3-oxopentyl)phenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

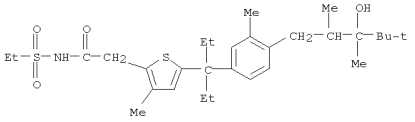
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633341-23-8 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-hydroxy-2,4,4-trimethylpentyl)-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

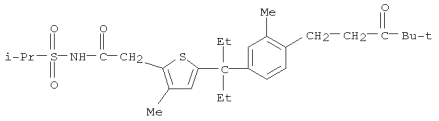


RN 633341-24-9 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-hydroxy-2,3,4,4-tetramethylpentyl)-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

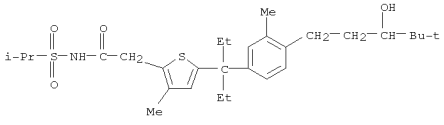


RN 633341-25-0 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-[4-(4,4-dimethyl-3-oxopentyl)-3-methylphenyl]-1-ethylpropyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

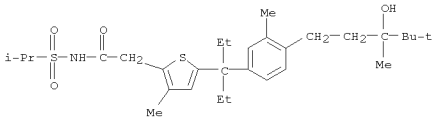
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633341-26-1 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-hydroxy-4,4-dimethylpentyl)-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

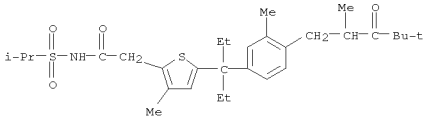


RN 633341-27-2 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-hydroxy-3,4,4-trimethylpentyl)-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

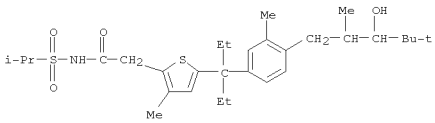


RN 633341-28-3 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[3-methyl-4-(2,4,4-trimethyl-3-oxopentyl)phenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

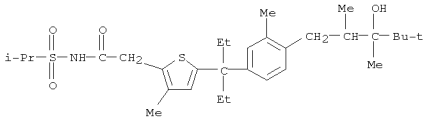
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633341-29-4 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-hydroxy-2,4,4-trimethylpentyl)-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

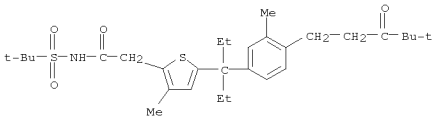


RN 633341-30-7 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-hydroxy-2,3,4,4-tetramethylpentyl)-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

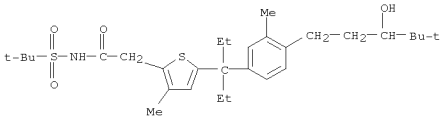


RN 633341-31-8 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-[4-(4,4-dimethyl-3-oxopentyl)-3-methylphenyl]-1-ethylpropyl]-3-methyl- (CA INDEX NAME)

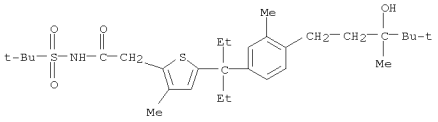
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633341-32-9 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-(3-hydroxy-4,4-dimethylpentyl)-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)

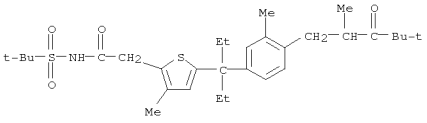


RN 633341-33-0 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-(3-hydroxy-3,4,4-trimethylpentyl)-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)

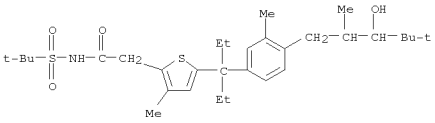


RN 633341-34-1 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[3-methyl-4-(2,4,4-trimethyl-3-oxopentyl)phenyl]propyl]-3-methyl- (CA INDEX NAME)

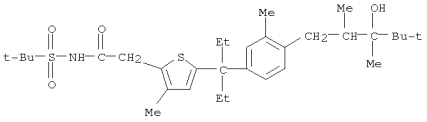
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633341-35-2 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-(3-hydroxy-2,4,4-trimethylpentyl)-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)

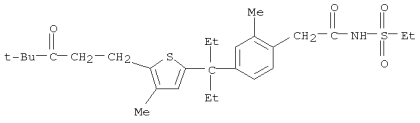


RN 633341-36-3 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-(3-hydroxy-2,3,4,4-tetramethylpentyl)-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)

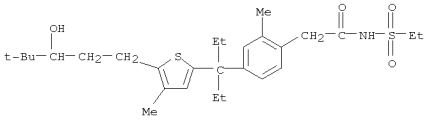


RN 633344-85-1 CAPLUS
CN Benzeneacetamide, 4-[1-[5-(4,4-dimethyl-3-oxopentyl)-4-methyl-2-thienyl]-1-ethylpropyl]-N-(ethylsulfonyl)-2-methyl- (CA INDEX NAME)

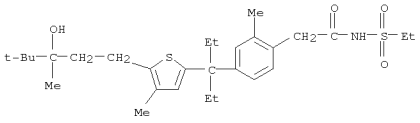
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



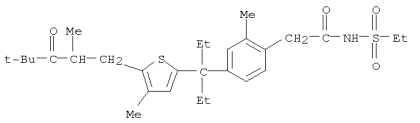
RN 633344-86-2 CAPLUS
CN Benzeneacetamide, 4-[1-ethyl-1-[5-(3-hydroxy-4,4-dimethylpentyl)-4-methyl-2-thienyl]propyl]-N-(ethylsulfonyl)-2-methyl- (CA INDEX NAME)



RN 633344-87-3 CAPLUS
CN Benzeneacetamide, 4-[1-ethyl-1-[5-(3-hydroxy-3,4,4-trimethylpentyl)-4-methyl-2-thienyl]propyl]-N-(ethylsulfonyl)-2-methyl- (CA INDEX NAME)

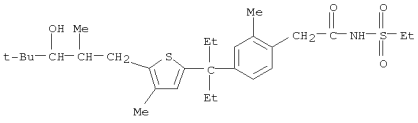


RN 633344-88-4 CAPLUS
CN Benzeneacetamide, 4-[1-ethyl-1-[4-methyl-5-(2,4,4-trimethyl-3-oxopentyl)-2-thienyl]propyl]-N-(ethylsulfonyl)-2-methyl- (CA INDEX NAME)

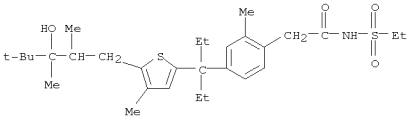


L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

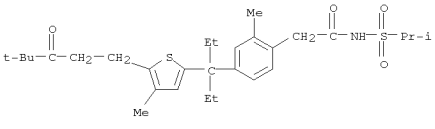
RN 633344-89-5 CAPLUS
CN Benzeneacetamide, 4-[1-ethyl-1-[5-(3-hydroxy-2,4,4-trimethylpentyl)-4-methyl-2-thienyl]propyl]-N-(ethylsulfonyl)-2-methyl- (CA INDEX NAME)



RN 633344-90-8 CAPLUS
CN Benzeneacetamide, 4-[1-ethyl-1-[5-(3-hydroxy-2,3,4,4-tetramethylpentyl)-4-methyl-2-thienyl]propyl]-N-(ethylsulfonyl)-2-methyl- (CA INDEX NAME)

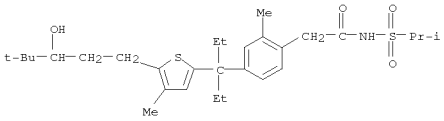


RN 633344-91-9 CAPLUS
CN Benzeneacetamide, 4-[1-[5-(4,4-dimethyl-3-oxopentyl)-4-methyl-2-thienyl]-1-ethylpropyl]-2-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

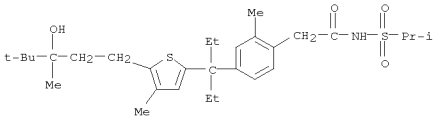


RN 633344-92-0 CAPLUS
CN Benzeneacetamide, 4-[1-ethyl-1-[5-(3-hydroxy-4,4-dimethylpentyl)-4-methyl-2-thienyl]propyl]-2-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

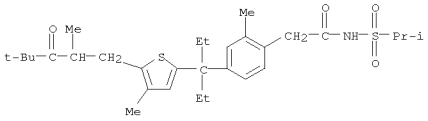
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633344-93-1 CAPLUS
CN Benzeneacetamide, 4-[1-ethyl-1-[5-(3-hydroxy-3,4,4-trimethylpentyl)-4-methyl-2-thienyl]propyl]-2-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

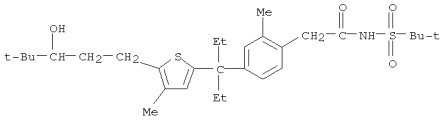


RN 633344-94-2 CAPLUS
CN Benzeneacetamide, 4-[1-ethyl-1-[4-methyl-5-(2,4,4-trimethyl-3-oxopentyl)-2-thienyl]propyl]-2-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

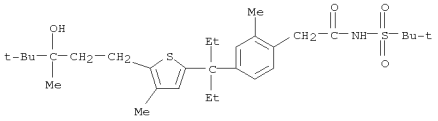


RN 633344-95-3 CAPLUS
CN Benzeneacetamide, 4-[1-ethyl-1-[5-(3-hydroxy-2,4,4-trimethylpentyl)-4-methyl-2-thienyl]propyl]-2-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

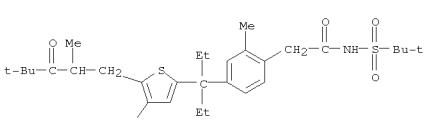
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633344-99-7 CAPLUS
CN Benzeneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-4-[1-ethyl-1-[5-(3-hydroxy-3,4,4-trimethylpentyl)-4-methyl-2-thienyl]propyl]-2-methyl- (CA INDEX NAME)

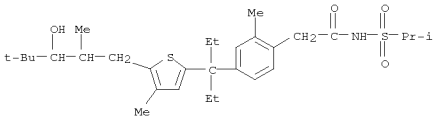


RN 633345-00-3 CAPLUS
CN Benzeneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-4-[1-ethyl-1-[4-methyl-5-(2,4,4-trimethyl-3-oxopentyl)-2-thienyl]propyl]-2-methyl- (CA INDEX NAME)

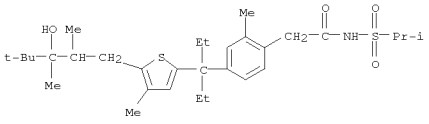


RN 633345-01-4 CAPLUS
CN Benzeneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-4-[1-ethyl-1-[5-(3-hydroxy-2,4,4-trimethylpentyl)-4-methyl-2-thienyl]propyl]-2-methyl- (CA INDEX NAME)

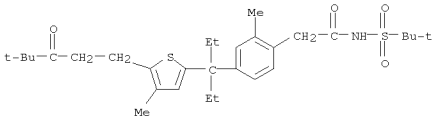
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633344-96-4 CAPLUS
CN Benzeneacetamide, 4-[1-ethyl-1-[5-(3-hydroxy-2,3,4,4-tetramethylpentyl)-4-methyl-2-thienyl]propyl]-2-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

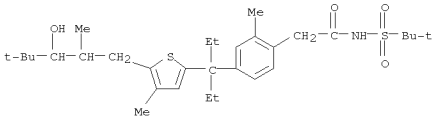


RN 633344-97-5 CAPLUS
CN Benzeneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-4-[1-[5-(4,4-dimethyl-3-oxopentyl)-4-methyl-2-thienyl]-1-ethylpropyl]-2-methyl- (CA INDEX NAME)

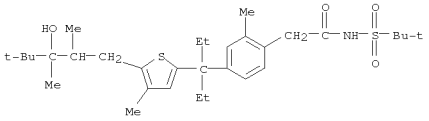


RN 633344-98-6 CAPLUS
CN Benzeneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-4-[1-ethyl-1-[5-(3-hydroxy-4,4-dimethylpentyl)-4-methyl-2-thienyl]propyl]-2-methyl- (CA INDEX NAME)

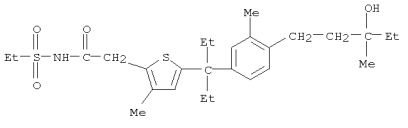
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



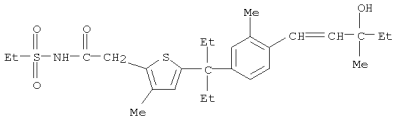
RN 633345-02-5 CAPLUS
CN Benzeneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-4-[1-ethyl-1-[5-(3-hydroxy-2,3,4,4-tetramethylpentyl)-4-methyl-2-thienyl]propyl]-2-methyl- (CA INDEX NAME)



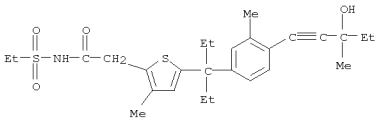
RN 633350-14-8 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-hydroxy-3-methylpentyl)-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)



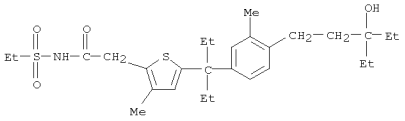
RN 633350-15-9 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-hydroxy-3-methyl-1-penten-1-yl)-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)



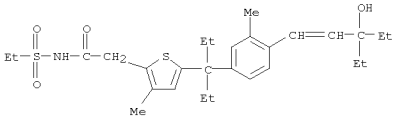
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RN 633350-16-0 CAPLUS
CN 2-Thiopheneacetamide,
5-[1-ethyl-1-[4-(3-hydroxy-3-methyl-1-pentyn-1-yl)-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)



RN 633350-17-1 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-ethyl-3-hydroxypentyl)-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

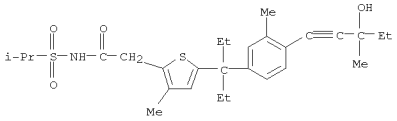


RN 633350-18-2 CAPLUS
CN 2-Thiopheneacetamide,
5-[1-ethyl-1-[4-(3-ethyl-3-hydroxy-1-penten-1-yl)-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

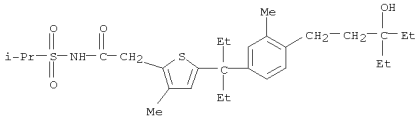


RN 633350-19-3 CAPLUS
CN 2-Thiopheneacetamide,
5-[1-ethyl-1-[4-(3-ethyl-3-hydroxy-1-pentyn-1-yl)-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

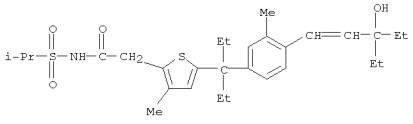
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633350-23-9 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-ethyl-3-hydroxypentyl)-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

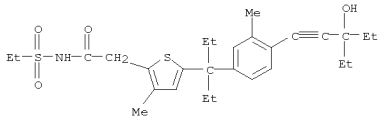


RN 633350-24-0 CAPLUS
CN 2-Thiopheneacetamide,
5-[1-ethyl-1-[4-(3-ethyl-3-hydroxy-1-penten-1-yl)-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

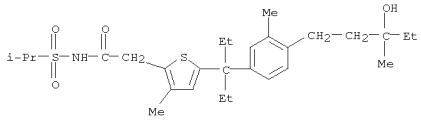


RN 633350-25-1 CAPLUS
CN 2-Thiopheneacetamide,
5-[1-ethyl-1-[4-(3-ethyl-3-hydroxy-1-pentyn-1-yl)-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

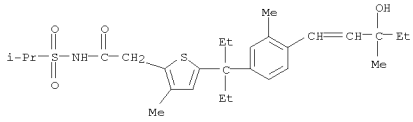
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633350-20-6 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-(3-hydroxy-3-methylpentyl)-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

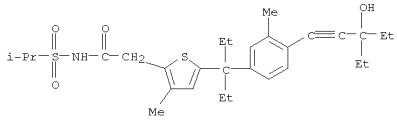


RN 633350-21-7 CAPLUS
CN 2-Thiopheneacetamide,
5-[1-ethyl-1-[4-(3-hydroxy-3-methyl-1-penten-1-yl)-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

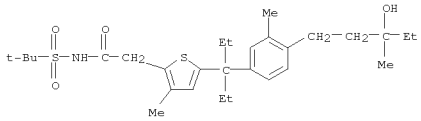


RN 633350-22-8 CAPLUS
CN 2-Thiopheneacetamide,
5-[1-ethyl-1-[4-(3-hydroxy-3-methyl-1-pentyn-1-yl)-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

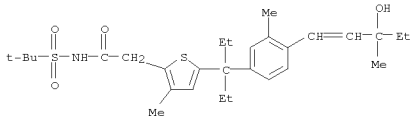
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



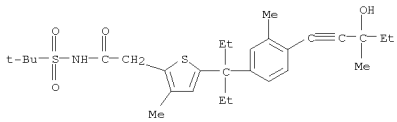
RN 633350-26-2 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-(3-hydroxy-3-methylpentyl)-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)



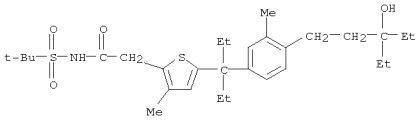
RN 633350-27-3 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-(3-hydroxy-3-methyl-1-penten-1-yl)-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)



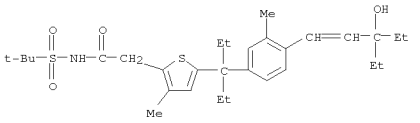
RN 633350-28-4 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-(3-hydroxy-3-methyl-1-pentyn-1-yl)-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)



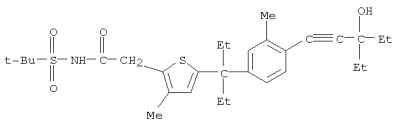
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RN 633350-29-5 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-(3-ethyl-3-hydroxypentyl)-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)



RN 633350-30-8 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-(3-ethyl-3-hydroxy-1-penten-1-yl)-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)

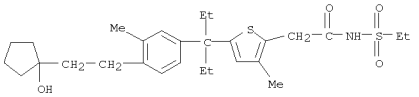


RN 633350-31-9 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-(3-ethyl-3-hydroxy-1-pentyn-1-yl)-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)

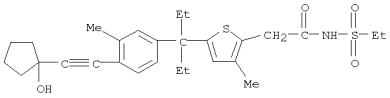


RN 633353-96-5 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclopentyl)ethyl]-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

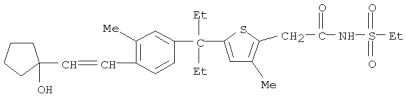
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



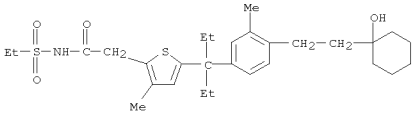
RN 633353-97-6 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclopentyl)ethynyl]-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)



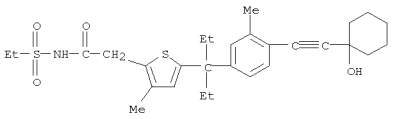
RN 633353-98-7 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclopentyl)ethenyl]-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)



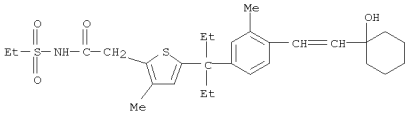
RN 633353-99-8 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclohexyl)ethyl]-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)



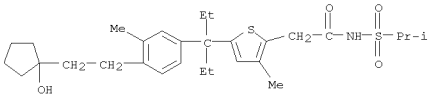
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RN 633354-00-4 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclohexyl)ethynyl]-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)



RN 633354-01-5 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclohexyl)ethenyl]-3-methylphenyl]propyl]-N-(ethylsulfonyl)-3-methyl- (CA INDEX NAME)

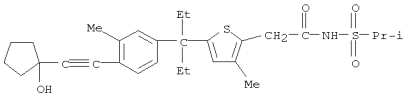


RN 633354-02-6 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclopentyl)ethyl]-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

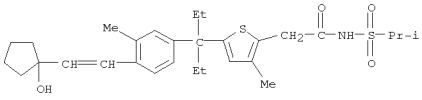


RN 633354-03-7 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclopentyl)ethynyl]-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)

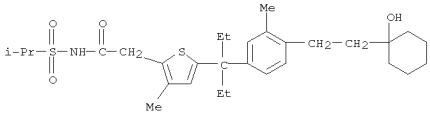
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



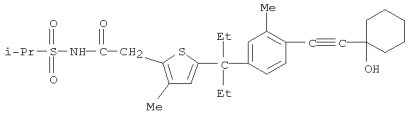
RN 633354-04-8 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclopentyl)ethenyl]-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)



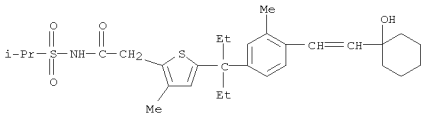
RN 633354-05-9 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclohexyl)ethyl]-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)



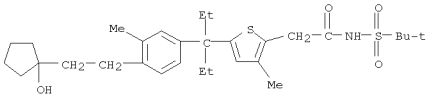
RN 633354-06-0 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclohexyl)ethynyl]-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)



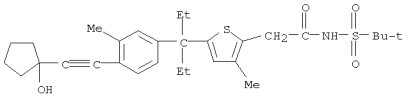
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RN 633354-07-1 CAPLUS
CN 2-Thiopheneacetamide, 5-[1-ethyl-1-[4-[2-(1-hydroxycyclohexyl)ethenyl]-3-methylphenyl]propyl]-3-methyl-N-[(1-methylethyl)sulfonyl]- (CA INDEX NAME)



RN 633354-08-2 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-[2-(1-hydroxycyclopentyl)ethyl]-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)

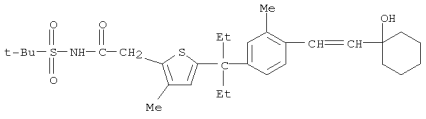


RN 633354-09-3 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-[2-(1-hydroxycyclopentyl)ethynyl]-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)



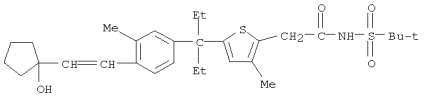
RN 633354-10-6 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-[2-(1-hydroxycyclopentyl)ethenyl]-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)

L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

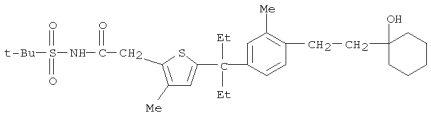


OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

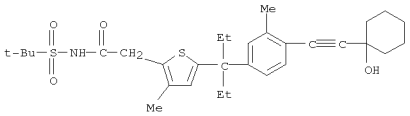
L7 ANSWER 8 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 633354-11-7 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-[2-(1-hydroxycyclohexyl)ethyl]-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)



RN 633354-12-8 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-[2-(1-hydroxycyclohexyl)ethynyl]-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)

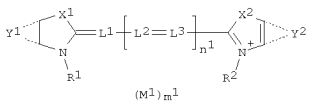


RN 633354-13-9 CAPLUS
CN 2-Thiopheneacetamide, N-[(1,1-dimethylethyl)sulfonyl]-5-[1-ethyl-1-[4-[2-(1-hydroxycyclohexyl)ethenyl]-3-methylphenyl]propyl]-3-methyl- (CA INDEX NAME)

L7 ANSWER 9 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2003:470991 CAPLUS
DOCUMENT NUMBER: 139:44172
TITLE: Silver halide photographic material containing methine dye and coupler
INVENTOR(S): Nakamura, Akio
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 70 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003172994 <--	A	20030620	JP 2002-236352	20020814
JP 4166529	B2	20081015		
US 20040038159 <--	A1	20040226	US 2002-251841	20020923
US 6828087	B2	20041207		
US 20050037296 <--	A1	20050217	US 2004-927469	20040827
US 7052827	B2	20060530		
PRIORITY APPLN. INFO.: <--			JP 2001-293949	A 20010926
			US 2002-251841	A1 20020923

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 139:44172
GI



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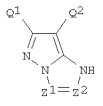
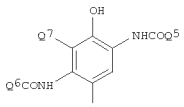
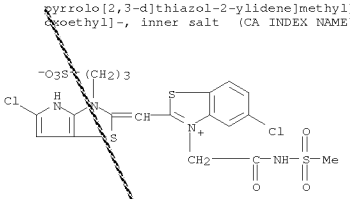


II

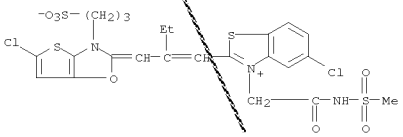


III

L7 ANSWER 9 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
AB The material, comprising a support coated with ≥1 Ag halide emulsion layer, contains ≥1 methine dye I [X1-2 = O, S, Se, Te, N, C,; Y1 = furan, pyrrole, or thiophene ring which may be condensed and/or substituted; Y2 = atoms to form benzene ring or 5-6 membered unsatd. heterocycle which may be condensed and/or substituted; R1-2 = (un)substituted alkyl, aryl, heterocycle; L1-3 = methine group; n1 = 0-1; M1 = counter ion; m1 ≥0] and ≥1 coupler selected from II [Z1-2 = CQ3, N; Q1, Q3 = H, monovalent group; Q2 = H, coupling releasing group; II may form dimer or polymer] and III [Q5 = (un)substituted aryl; Q6 = (un)substituted alkyl; Q7 = H, halo, alkoxy,alkyl; X = H, releasing group by the reaction with developer oxide]. The material shows high sensitivity and less residual color after processing.
IT 540753-72-8 540753-74-0
RL: TEM (Technical or engineered material use); USES (Uses)
(photog. emulsion containing methine dye sensitizer and pyrazolotriazole or phenol coupler)
RN 540753-72-8 CAPLUS
CN Benzothiazolium, 5-chloro-2-[[5-chloro-3,4-dihydro-3-(3-sulfopropyl)-2H-pyrrolo[2,3-d]thiazol-2-ylidene]methyl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



RN 540753-74-0 CAPLUS
CN Benzothiazolium, 5-chloro-2-[2-[[5-chloro-3-(3-sulfopropyl)thieno[2,3-d]oxazol-2(3H)-ylidene]methyl]-1-buten-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



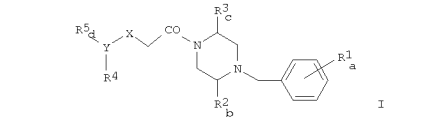
L7 ANSWER 10 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2003:335088 CAPLUS
DOCUMENT NUMBER: 138:354006
TITLE: Preparation of piperazine derivatives with CCR1 receptor antagonist activity
INVENTOR(S): Blumberg, Laura Cook; Brown, Matthew Frank; Hayward, Matthew Merrill; Poss, Christopher Stanley; Lundquist, Gregory Dean, Jr.; Shavnya, Andrei
PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: PCT Int. Appl., 139 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003035627	A1	20030501	WO 2002-IB3989	20020926
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2463272	A1	20030501	CA 2002-2463272	20020926
CA 2463272	C	20091117		
AU 2002337408	A1	20030506	AU 2002-337408	20020926
EP 1438298	A1	20040721	EP 2002-772651	20020926
EP 1438298	B1	20100127		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
EE 200400088	A	20041015	EE 2004-88	20020926
BR 2002013452	A	20041109	BR 2002-13452	20020926
HU 2004001735	A2	20050128	HU 2004-1735	20020926
HU 2004001735	A3	20050628		
CN 1575283	A	20050202	CN 2002-820888	20020926
JP 2005507923	T	20050324	JP 2003-538143	20020926
AT 456559	T	20100215	AT 2002-772651	20020926
US 20040034034	A1	20040219	US 2002-273658	20021018

L7 ANSWER 10 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

US 7098212	B2	20060829		
MX 2004002423	A	20040531	MX 2004-2423	20040312
ZA 2004002090	A	20050523	ZA 2004-2090	20040316
BG 108674	A	20050430	BG 2004-108674	20040408
NO 2004001631	A	20040526	NO 2004-1631	20040421
PRIORITY APPLN. INFO.:			US 2001-338601P	P 20011022
			WO 2002-IB3989	W 20020926

OTHER SOURCE(S): MARPAT 138:354006
GI



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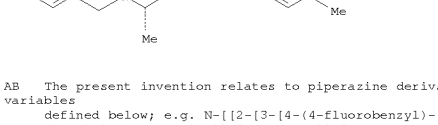


II

AB The present invention relates to piperazine derivs. (shown as I; variables defined below; e.g. N-[[2-[3-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-3-oxopropyl]-5-methylphenoxy]acetyl]methanesulfonamide (shown as II)) and the pharmaceutically acceptable forms thereof. Moreover, the present invention is also directed at pharmaceutical compns. comprising a compound I and a pharmaceutically acceptable carrier. Furthermore, the present invention is directed at methods of using the herein described compds. and compns. for treating or preventing a disorder or condition that can be treated or prevented by antagonizing the 15 CCR1 receptor in a mammal. For I: a = 0-5; b = 0-2; c = 0-2; d = 0-4; X = O, S, CH2, or NR6; Y = (C6-C10)aryl or (C2-C9)heteroaryl; each R1 = H, HO, halo, (C1-C8)alkyl, (C1-C8)alkylO, HO(C1-C8)alkyl, NC, H2N, H2N(C1-C8)alkyl, HO2C, (C1-C8)alkylC(O), (C1-C8)alkylC(O)(C1-C8)alkyl, H2NC(O), or H2NC(O)(C1-C8)alkyl. Each R2 and R3 = H, oxo, (C1-C8)alkyl, (C3-C8)cycloalkyl(C1-C8)alkyl, (C6-C10)aryl, etc. R4 = (HO2C)(H2N)(C1-C8)alkyl, (HO2C)[[(C1-C8)alkyl]NH](C1-C8)alkyl, (HO2C)[[(C1-C8)alkyl]2N](C1-C8)alkyl, etc.; R5 = H, HO, halo, NC, HO2C, H2N, (C1-C8)alkylNH, [(C1-C8)alkyl]2N, etc.; R6 = H, (C1-C8)alkyl, (C1-C8)alkylC(O), (C6-C10)arylC(O), (C2-C9)heteroarylC(O), H2NC(O), (C1-C8)alkylNHC(O), [(C1-C8)alkyl]2NC(O), (C1-C8)alkylOC(O), or (C1-C8)alkylSO2; addnl. details are given in the claims. Although the methods of prepn. are not claimed, 47 example prepns. and characterization data (mass spectral parent ion mass) for 259 examples of I are included. I are potent and selective inhibitors of MIP-1α (CCL3) binding to its receptor CCR1 found on inflammatory and immunomodulatory cells (preferably leukocytes and lymphocytes). These compds. also inhibit MIP-1α (and the related chemokines shown to interact with CCR1)-induced chemotaxis of THP-1 cells and human leukocytes. All I in the examples had IC50 of <10 μM in the MIP-1α-induced chemotaxis assay.
IT 519172-07-7P, N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide
519172-37-3P, N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]pyridin-3-yl]acetyl]methanesulfonamide
519173-91-2P, N-[[5-Bromo-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide
519173-92-3P, N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)piperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519173-93-4P, N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]-C,C,C-trifluoromethanesulfonamide
519173-94-5P, N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]-4-fluorobenzenesulfonamide 519173-95-6P, N-[[2-[2-[4-(4-Fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]-4-methoxyphenyl]acetyl]methanesulfonamide
519173-96-7P, N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]benzenesulfonamide
519173-97-8P, N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]-2-methylbenzenesulfonamide 519173-98-9P, Ethanesulfonic acid [[5-chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]amide 519174-00-6P, N-[[5-Bromo-2-[2-[4-(4-fluorobenzyl)piperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-01-7P, N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)-(2R)-2-methylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-02-8P, N-[[5-Bromo-2-[2-[4-(4-fluorobenzyl)-(2R)-2-methylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-03-9P, N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]-4-methoxybenzenesulfonamide
519174-04-0P, 2-Chloro-N-[[5-chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]benzenesulfonamide 519174-05-1P, N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]-2-fluorobenzenesulfonamide
519174-06-2P, N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]-4-

L7 ANSWER 10 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
methylbenzenesulfonamide 519174-07-3P, Propane-2-sulfonic acid

[[5-chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]amide 519174-08-4P, Propane-1-sulfonic acid [[5-chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]amide 519174-11-9P,

N-[[4-Chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-12-0P, N-[[4-Chloro-2-[2-[4-(4-fluorobenzyl)-(2R)-2-methylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-13-1P,

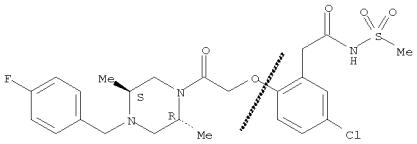
N-[[5-Chloro-2-[2-[4-(3,4-difluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-14-2P,

N-[[5-Chloro-2-[2-[4-(4-chlorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-16-4P,

N-[[5-Chloro-2-[2-[4-(4-fluorobenzyl)-(2R,5S)-2,5-dimethylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]phenylmethanesulfonamide 519174-18-6P , N-[[5-Chloro-2-[2-[4-(4-chlorobenzyl)-(2R)-2-methylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-19-7P, N-[[5-Chloro-2-[2-[4-(3,4-difluorobenzyl)-(2R)-2-methylpiperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-20-0P, N-[[5-Chloro-2-[2-[(2R)-2-ethyl-4-(4-fluorobenzyl)piperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-21-1P, N-[[5-Bromo-2-[2-[(2R)-2-ethyl-4-(4-fluorobenzyl)piperazin-1-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide 519174-22-2P, N-[[2-[2-[(2R)-2-Ethyl-4-(4-fluorobenzyl)piperazin-1-yl]-2-oxoethoxy]-5-methylphenyl]acetyl]methanesulfonamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; prepn. of piperazine derivs. with CCR1 receptor antagonist activity)

RN 519172-07-7 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

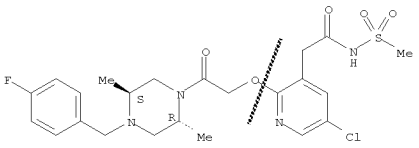
Absolute stereochemistry.



RN 519172-37-3 CAPLUS

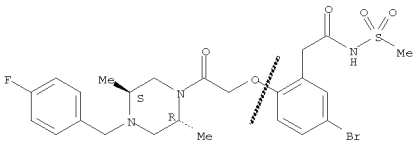
L7 ANSWER 10 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CN 3-Pyridineacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.

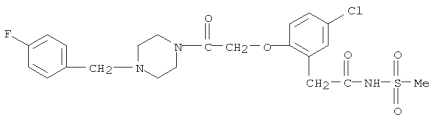


RN 519173-91-2 CAPLUS
CN Benzeneacetamide, 5-bromo-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



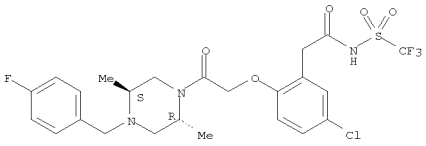
RN 519173-92-3 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[4-[(4-fluorophenyl)methyl]-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)



RN 519173-93-4 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-

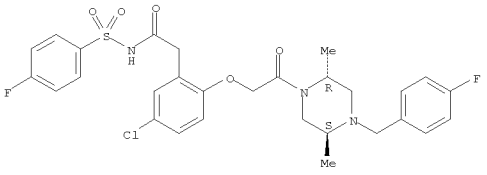
L7 ANSWER 10 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(trifluoromethyl)sulfonyl]- (CA INDEX NAME)

Absolute stereochemistry.



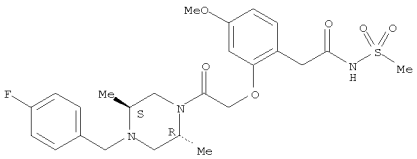
RN 519173-94-5 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(4-fluorophenyl)sulfonyl]- (CA INDEX NAME)

Absolute stereochemistry.



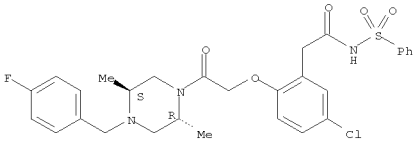
RN 519173-95-6 CAPLUS
CN Benzeneacetamide, 2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-4-methoxy-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



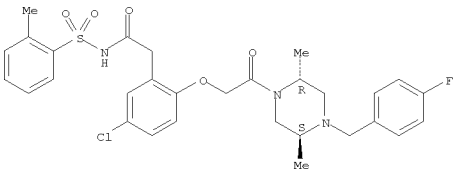
L7 ANSWER 10 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RN 519173-96-7 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(phenylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



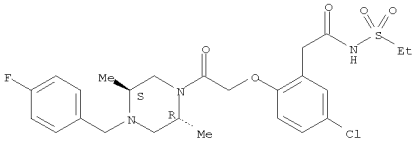
RN 519173-97-8 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(2-methylphenyl)sulfonyl]- (CA INDEX NAME)

Absolute stereochemistry.

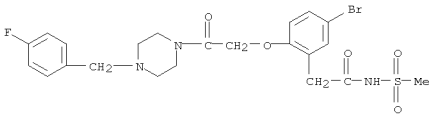


RN 519173-98-9 CAPLUS
CN Benzeneacetamide, 5-chloro-N-(ethylsulfonyl)-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]- (CA INDEX NAME)

Absolute stereochemistry.

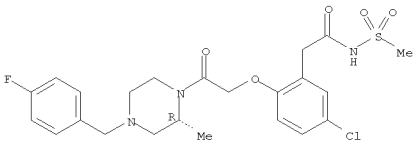


L7 ANSWER 10 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RN 519174-00-6 CAPLUS
CN Benzeneacetamide,
5-bromo-2-[2-[4-[(4-fluorophenyl)methyl]-1-piperazinyl]-
2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)



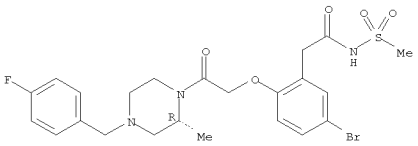
RN 519174-01-7 CAPLUS
CN Benzeneacetamide,
5-chloro-2-[2-[(2R)-4-[(4-fluorophenyl)methyl]-2-methyl-
1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.

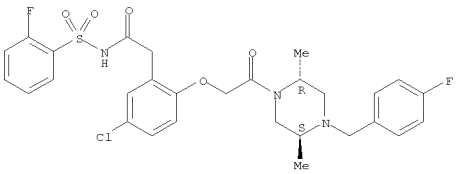


RN 519174-02-8 CAPLUS
CN Benzeneacetamide,
5-bromo-2-[2-[(2R)-4-[(4-fluorophenyl)methyl]-2-methyl-1-
piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.

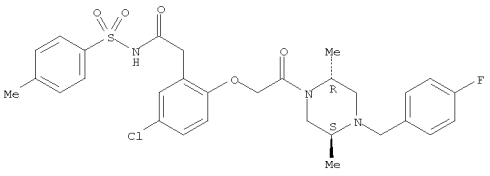


L7 ANSWER 10 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



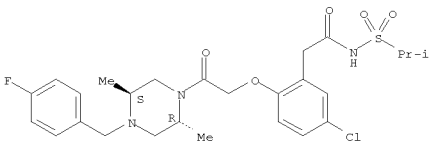
RN 519174-06-2 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-
dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(4-methylphenyl)sulfonyl]- (CA
INDEX NAME)

Absolute stereochemistry.



RN 519174-07-3 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-
dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(1-methylethyl)sulfonyl]- (CA
INDEX NAME)

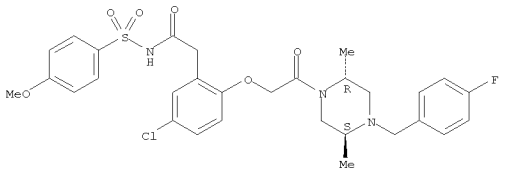
Absolute stereochemistry.



RN 519174-08-4 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-
dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(propylsulfonyl)- (CA INDEX NAME)

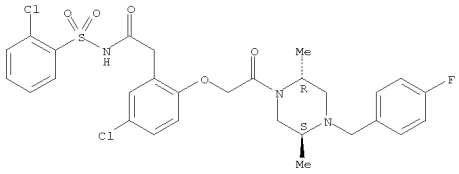
L7 ANSWER 10 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RN 519174-03-9 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-
dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(4-methoxyphenyl)sulfonyl]- (CA
INDEX NAME)

Absolute stereochemistry.



RN 519174-04-0 CAPLUS
CN Benzeneacetamide, 5-chloro-N-[(2-chlorophenyl)sulfonyl]-2-[2-[(2R,5S)-4-
[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]- (CA
INDEX NAME)

Absolute stereochemistry.

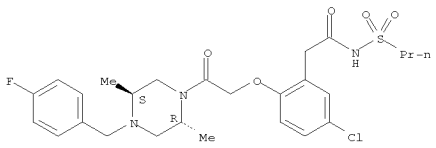


RN 519174-05-1 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-
dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(2-fluorophenyl)sulfonyl]- (CA
INDEX NAME)

Absolute stereochemistry.

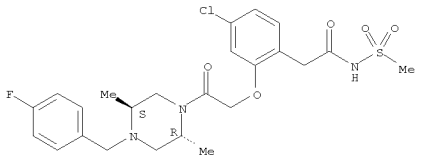
L7 ANSWER 10 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

Absolute stereochemistry.



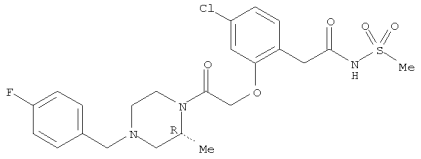
RN 519174-11-9 CAPLUS
CN Benzeneacetamide, 4-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-
dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



RN 519174-12-0 CAPLUS
CN Benzeneacetamide,
4-chloro-2-[2-[(2R)-4-[(4-fluorophenyl)methyl]-2-methyl-
1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

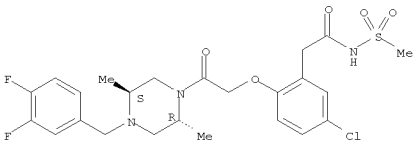
Absolute stereochemistry.



RN 519174-13-1 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(3,4-difluorophenyl)methyl]-
2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX
NAME)

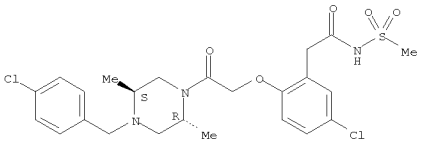
L7 ANSWER 10 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

Absolute stereochemistry.



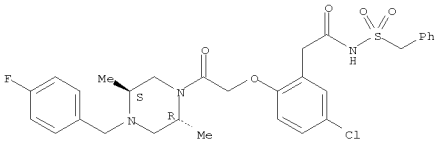
RN 519174-14-2 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-chlorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



RN 519174-16-4 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R,5S)-4-[(4-fluorophenyl)methyl]-2,5-dimethyl-1-piperazinyl]-2-oxoethoxy]-N-[(phenylmethyl)sulfonyl]- (CA INDEX NAME)

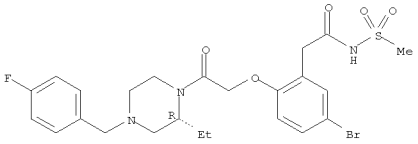
Absolute stereochemistry.



RN 519174-18-6 CAPLUS
CN Benzeneacetamide,
5-chloro-2-[2-[(2R)-4-[(4-chlorophenyl)methyl]-2-methyl-

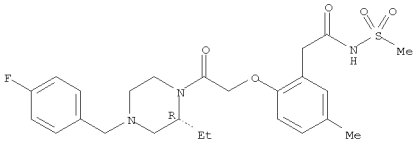
L7 ANSWER 10 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CN Benzeneacetamide,
5-bromo-2-[2-[(2R)-2-ethyl-4-[(4-fluorophenyl)methyl]-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



RN 519174-22-2 CAPLUS
CN Benzeneacetamide, 2-[2-[(2R)-2-ethyl-4-[(4-fluorophenyl)methyl]-1-piperazinyl]-2-oxoethoxy]-5-methyl-N-(methylsulfonyl)- (CA INDEX NAME)

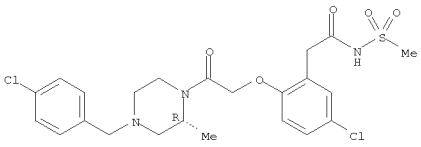
Absolute stereochemistry.



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

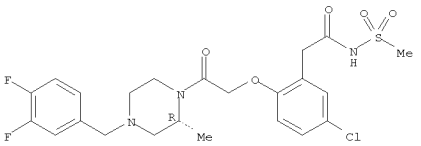
L7 ANSWER 10 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



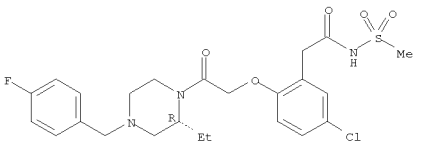
RN 519174-19-7 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[(2R)-4-[(3,4-difluorophenyl)methyl]-2-methyl-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



RN 519174-20-0 CAPLUS
CN Benzeneacetamide,
5-chloro-2-[2-[(2R)-2-ethyl-4-[(4-fluorophenyl)methyl]-1-piperazinyl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



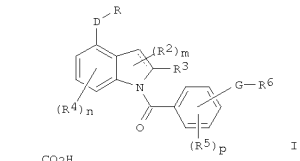
RN 519174-21-1 CAPLUS

L7 ANSWER 11 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2003:221658 CAPLUS
DOCUMENT NUMBER: 138:255237
TITLE: Preparation of indole derivatives as DP receptor antagonists
INVENTOR(S): Torisu, Kazuhiko; Hasegawa, Tomoyuki; Kobayashi, Kaoru; Nambu, Fumio
PATENT ASSIGNEE(S): Ono Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 210 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

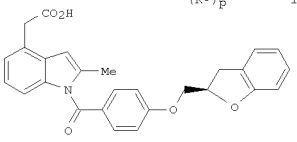
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003022813 <--	A1	20030320	WO 2002-JP9077	20020906
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002335354 <--	A1	20030324	AU 2002-335354	20020906
EP 1424325 <--	A1	20040602	EP 2002-798037	20020906
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 4292402 <--	B2	20090708	JP 2003-526889	20020906
US 20050004096 <--	A1	20050106	US 2004-488834	20040308
US 7153852	B2	20061226		
PRIORITY APPLN. INFO.: <--			JP 2001-271281 A	20010907
			WO 2002-JP9077 W	20020906

OTHER SOURCE(S): MARPAT 138:255237
GI

L7 ANSWER 11 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



I



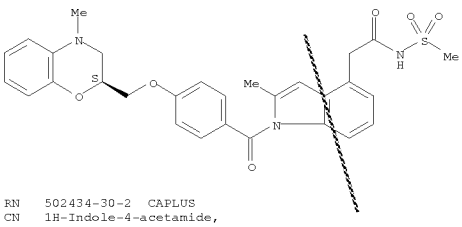
II

AB The title indole compds., substituted by either dihydrobenzoxazinyl or benzodioxanyl, with general formula of I [wherein R = COR1, CH2OR0, or CO2R20; R0 = H or acyl; R1 = alkoxy or (un)substituted amino; R20 = allyl or PhCH2; R2 = H, (alkoxy)alkyl, alkoxy, halo, NH2, trihalomethyl, CN, OH, PhCH2, or 4-MeO-PhCH2; R3 = H, alkyl, alkoxy, halo, trihalomethyl, CN, or OH; R4 and R5 = independently H, (alkoxy)alkyl, alkoxy, halo, NO2, NH2, trihalomethyl, trihalomethoxy, CN, or OH; D = a single bond, alkylene, alkenylene, or oxyalkylene; G = CONH, NHCO, SO2NH, NHSO2, diazo, (un)substituted alkylene, or alkenylene; R6 = 3-15 membered cyclyl or (un)substituted 4-15 membered heterocyclyl; or G and R6 together form (un)substituted alkyl, alkenyl, or alkynyl; n = 1-3; m = 1-3; p = 1-4] and pharmaceutically acceptable salts thereof are prepared as prostaglandin D2 (PGD2) receptor antagonists. For example, the indole II was prepared in a multi-step synthesis. II showed Ki of 0.031 μM against DP receptor in rat. Compds. I are useful in preventing/treating allergic diseases, diseases associated with itch, diseases secondarily caused by behaviors associating itch, inflammation, chronic obstructive pulmonary disease, ischemic reperfusion injury, cerebrovascular diseases, rheumatoid arthritis-complicated pleuritis, ulcerative colitis, etc. (no data). Formulations containing I as an active ingredient were also described.

IT 502434-28-8P 502434-30-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(DP receptor antagonist; preparation of indole derivs. as DP receptor antagonists)

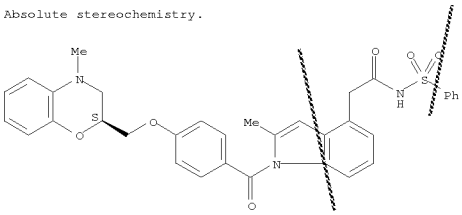
L7 ANSWER 11 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RN 502434-28-8 CAPLUS
CN 1H-Indole-4-acetamide, 1-[4-[[(2S)-3,4-dihydro-4-methyl-2H-1,4-benzoxazin-2-yl]methoxy]benzoyl]-2-methyl-N-(methylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



RN 502434-30-2 CAPLUS
CN 1H-Indole-4-acetamide, 1-[4-[[(2S)-3,4-dihydro-4-methyl-2H-1,4-benzoxazin-2-yl]methoxy]benzoyl]-2-methyl-N-(phenylsulfonyl)- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 12 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2003:154382 CAPLUS
DOCUMENT NUMBER: 138:187795
TITLE: Preparation of aryl or heterocyclyl-substituted benzoic acid and alkanoic acid derivatives as antagonists of prostaglandin E2 (PEG2) receptors
INVENTOR(S): Tani, Kousuke; Asada, Masaki; Kobayashi, Kaoru; Narita, Masami; Ogawa, Mikio
PATENT ASSIGNEE(S): Ono Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 1009 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003016254	A1	20030227	WO 2002-JP8120	20020808
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2457468	A1	20030227	CA 2002-2457468	20020808
AU 2002323916	A1	20030303	AU 2002-323916	20020808
EP 1431267	A1	20040623	EP 2002-755874	20020808
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
BR 2002011810	A	20040824	BR 2002-11810	20020808
CN 1551866	A	20041201	CN 2002-817376	20020808
HU 2004001963	A2	20050128	HU 2004-1963	20020808
HU 2004001963	A3	20060130		
NZ 531153	A	20051028	NZ 2002-531153	20020808
NZ 541950	A	20070223	NZ 2002-541950	20020808
RU 2315746	C2	20080127	RU 2004-106623	20020808
CN 101284773	A	20081015	CN 2008-10002260	20020808
ZA 2004000973	A	20050104	ZA 2004-973	20040205
NO 2004000564	A	20040510	NO 2004-564	20040206
MX 2004001253	A	20040603	MX 2004-1253	20040209

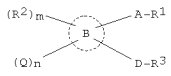
L7 ANSWER 12 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

US 20060258728	A1	20061116	US 2004-486220	20040909
US 7491748	B2	20090217		
US 20090318703	A1	20091224	US 2008-259012	20081027

PRIORITY APPLN. INFO.:

JP 2001-241867	A	20010809
CN 2002-817376	A3	20020808
WO 2002-JP8120	W	20020808
US 2004-486220	A3	20040909

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 138:187795
GI

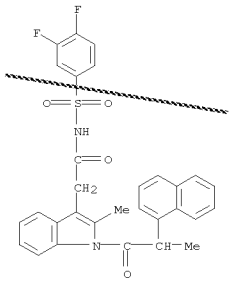


I

AB Carboxylic acid derivs. (I) and nontoxic salts thereof [wherein R1 = CO2H, CO2R4, CH2OH, COR5SO2R6, CONH2, CH2NR5SO2R6, CH2NR9COR10, CH2NR9CONR5SO2R6, CH2SO2NR9COR10, CH2O2CNR5SO2R6, tetrazole, 1,2,4-oxadiazol-5-one, 1,2,4-oxadiazol-5-thione, 1,2,4-thiadiazol-5-one, etc. (wherein R4 = C1-6 alkyl, hydroxy-C1-4 alkyl, C1-4 alkoxy-C1-4 alkyl, carboxy-C1-4 alkyl, etc.; R5, R9 = H, C1-6 alkyl; R6 = C1-6 alkyl, C3-15 mono-, di-, or tricarbocyclic, 3- to 13-membered mono-, di-, or tricyclic heterocyclyl, etc.; R10 = H, R6); A = a single bond, C1-6 alkylene, C2-6 alkenylene, C2-6 alkynylene, etc.; the ring B = C3-12 mono- or dicyclic carbocyclic ring, 3- to 12-membered mono- or dicyclic heterocyclic ring; R2 = C1-6 alkyl, C1-6 alkoxy, C1-6 alkylthio, C2-6 alkenyl, C2-6 alkynyl, halo, CHF2, CF3, NO2, cyano, Ph, oxo; m, n = 0,1,2; Q = (C1-4 alkylene, C2-4 alkenylene, or C2-4 alkynylene)-Cyc2, -C1-4 alkylene-Z-Cyc3, amino-C1-4 alkyl, cyano-C1-4 alkyl, acylamino-C1-4 alkyl, 3- to 7-membered monocyclic carbocyclyl, 3- to 6-membered monocyclic heterocyclyl, etc. (wherein Cyc2, Cyc3 = C3-15 mono-, di-, or tricyclic carbocyclyl or heterocyclyl, etc.; Z = O, S, SO, SO2, NH, NHCO, etc.); D = an linking chain consisting of 1-2 or 3-6 of atoms selected from C, N, O, or S, etc.; R3 = C1-6 alkyl, C3-15 mono-, di-, or tricyclic carbocyclyl, 3- to 15-membered mono-, di-, or tricyclic heterocyclyl, etc.] are prepared These carboxylic acid derivs. include phenylpropanoic acid, phenylpropenoic acid, phenylpropanamide, phenylpropenamide, 3-oxoisoindolin-1-ylacetic acid, benzylbenzoic acid, benzylaminoacetic acid, pyrazolylmethylbenzoic acid, benzoylaminoacetic acid, (pyrazolylmethylphenyl)propenoic acid, pyrazolylmethylpropanoic acid, (pyridinyloxyphenyl)propanoic acid, phenoxyacetic acid, phenylbutanoic acid, (pyrazolylmethyl)propanamide, (piperazinylmethylphenyl)propanamide,

L7 ANSWER 12 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(morpholinylmethylphenyl)propanamide, (pyridinyloxyphenyl)propanamide, (pyrazolylmethyl)propenamide (oxoimidazolidinylmethylphenyl)propanamide, (oxopyrrolidinylmethylphenyl)propenamide, (thiophenylmethylphenyl)propenamide, (pyrazolylmethylphenylamino)acetamide, (thiazolylaminomethylphenyl)propanamide, thiophenylpropenamide, (pyrazolylmethylphenoxy)acetamide, (phenoxymethyl)benzamide, (pyrazolylmethylphenylethyl)-1,2,4-oxadiazol-5-one, and (pyrazolylmethylphenylindolyl)acetic acid. Because of binding to PEG2 receptors, in particular, subtype EP3 and/or subtype EP4 and having antagonism, the compds. I are useful in preventing and/or treating diseases such as pain, allodynia, hyperalgesia, pruritus (itching), urticaria, atopic dermatitis, contact dermatitis, Urushi (Japanese lacquer tree) dermatitis, allergic conjunctivitis, symptoms during dialysis, asthma, rhinitis, allergic rhinitis, nasal congestion, sneeze, psoriasis, pollakiuria (increased urinary frequency), urination disorder, ejaculation (semination) disorder, fever (pyrexia), systemic inflammation reaction, learning disorder, Alzheimer's disease, neovascularization, cancer formation, cancer proliferation, cancer metastasis to organs, cancer metastasis to bone, hypercalcemia accompanied by cancer metastasis to bone, retinopathy, rubrum, erythema (rash), leucoma, skin moth-patch, heat burn, burn, steroid burn, kidney failure, nephropathy, acute or chronic nephritis, blood electrolyte disorder, imminent abortion, threatened abortion, excessive menstruation, dysmenorrhea, endometriosis, premenstrual syndrome, uterine gland myopathy, reprodn. disorder, and stress. They are also useful in preventing and/or treating anxiety, depression, psychophysiol. disorder, mental retardation, thrombus, embolism, transient ischemic attack, cerebral infarction, atheroma, organ transplant, heart failure, hypertension, myocardial infarction, arteriosclerosis, circulation disorders or ulcers assocd. therewith, nerve disorders, vascular dementia, edema, diarrhea, constipation, biliary excretion disorder, ulcerative colitis, Crohn's disease, irritable bowel syndrome, redn. of rebound after using steroid drugs, aids for decreasing or removing steroid drugs, bone diseases, systemic granuloma, immune diseases, pyorrhea alveolaris, gingivitis, periodontal disease, nerve cell death, lung disorder, liver disorder, acute hepatitis, myocardial ischemia, Kawasaki disease, multiple organ failure, chronic headache, angiitis, venous failure, varicose vein (varicosis), anal fistula, diabetes insipidus, neonatal patent ductus arteriosus, and cholelithiasis.
Thus, 4-hydroxymethyl-2-[2-(naphthalen-2-yl)ethoxy]cinnamic acid Et ester was mesylated by methanesulfonyl chloride in the presence of Et3N in THF at 0° for 15 min and condensed with pyrazole in the presence of NaH in DMF at 0° to give 2-[2-(naphthalen-2-yl)ethoxy]-4-(1-pyrazolylmethyl)cinnamic acid Et ester.
4-[2-[[2-(Naphthalen-1-yl)propanoyl]amino]-4-methylthiomethylphenyl]butanoic acid inhibited the binding of [3H]PGE2 to prostaglandin E2 (PEG2) receptor subtype EP1, Ep2, EP3, and EP4 expressed in CHO cells with Ki of >10, >10, 0.27, and 0.038 μM, resp. A tablet

L7 ANSWER 12 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
formulation contg. (2E)-2-[2-(naphthalen-2-yl)ethoxy]-4-(1-pyrazolylmethyl)cinnamic acid was described.
IT 499153-88-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of aryl or heterocyclyl-substituted benzoic acid and alkanoic acid derivs. as antagonists of prostaglandin E2 (PEG2) receptors as therapeutic agents)
RN 499153-88-7 CAPLUS
CN 1H-Indole-3-acetamide, N-[(3,4-difluorophenyl)sulfonyl]-2-methyl-1-[2-(1-naphthalenyl)-1-oxopropyl]- (CA INDEX NAME)



OS.CITING REF COUNT: 24 THERE ARE 24 CAPLUS RECORDS THAT CITE THIS RECORD (43 CITINGS)
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

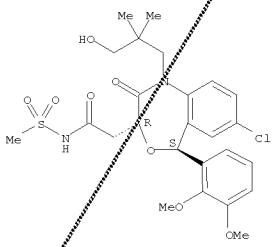
L7 ANSWER 13 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2003:22711 CAPLUS
DOCUMENT NUMBER: 138:83384
TITLE: Preventives/remedies for organ functional disorders with increasing ubiquinone and inhibiting squalene synthase
INVENTOR(S): Sugiyama, Yasuo; Nishimoto, Tomoyuki; Kiyota, Yoshihiro
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 121 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003002147	A1	20030109	WO 2002-JP6495	20020627
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2451163	A1	20030109	CA 2002-2451163	20020627
AU 2002313277	A1	20030303	AU 2002-313277	20020627
JP 2003081873	A	20030319	JP 2002-188133	20020627
EP 1407782	A1	20040414	EP 2002-738822	20020627
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 20040204500	A1	20041014	US 2003-480707	20031211
US 20060241096	A1	20061026	US 2006-473560	20060623
US 20080132483	A1	20080605	US 2008-9277	20080117
PRIORITY APPLN. INFO.:			JP 2001-197419 A	20010628
			WO 2002-JP6495 W	20020627
			US 2003-480707 A3	20031211
			US 2006-473560 B1	20060623

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 138:83384
AB Preventives/remedies for organ functional disorders, preventives/remedies for organ dysfunction and preventives/remedies for obesity and sequels thereof which contain a compound having an effect of increasing ubiquinone,

L7 ANSWER 13 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
its salt or prodrugs of the same; and ubiquinone increasing agents contg. a compd. having a squalene synthase inhibitory effect, its salt or prodrugs of the same.
IT 189059-84-5 189059-85-6 189060-07-9
189060-45-5 383652-05-9
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Preventives/remedies for organ functional disorders with increasing ubiquinone and inhibiting squalene synthase)
RN 189059-84-5 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-1-(3-hydroxy-2,2-dimethylpropyl)-N-(methylsulfonyl)-2-oxo-, (3R,5S)- (CA INDEX NAME)

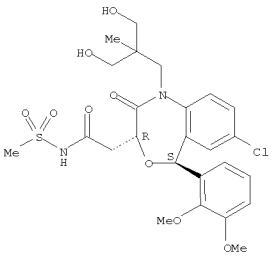
Absolute stereochemistry.



RN 189059-85-6 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-1-[3-hydroxy-2-(hydroxymethyl)-2-methylpropyl]-N-(methylsulfonyl)-2-oxo-, (3R,5S)- (CA INDEX NAME)

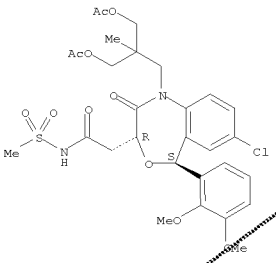
Absolute stereochemistry.

L7 ANSWER 13 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



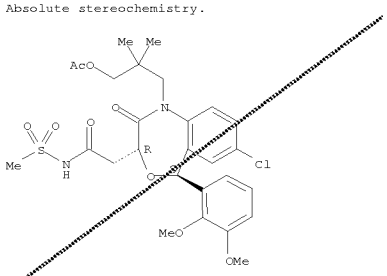
RN 189060-07-9 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 1-[3-(acetyloxy)-2-[(acetyloxy)methyl]-2-methylpropyl]-7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-N-(methylsulfonyl)-2-oxo-, (3R,5S)- (CA INDEX NAME)

Absolute stereochemistry.



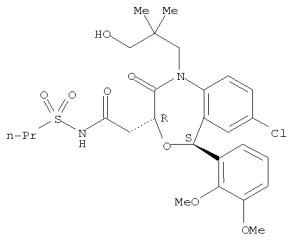
RN 189060-45-5 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 1-[3-(acetyloxy)-2,2-dimethylpropyl]-7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-N-(methylsulfonyl)-2-oxo-, (3R,5S)- (CA INDEX NAME)

L7 ANSWER 13 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
Absolute stereochemistry.



RN 383652-05-9 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-1-(3-hydroxy-2,2-dimethylpropyl)-2-oxo-N-(propylsulfonyl)-, (3R,5S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

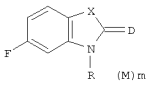


OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)
REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 14 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2002:607988 CAPLUS
DOCUMENT NUMBER: 137:177047
TITLE: Silver halide photographic material containing more than two kinds of sensitizing dyes
INVENTOR(S): Nakamura, Akio; Morimura, Kimiyasu; Hioki, Takanori
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 36 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002229145	A	20020814	JP 2001-21719	20010130
US 20020168599	A1	20021114	US 2002-58285	20020130
US 6759186	B2	20040706		

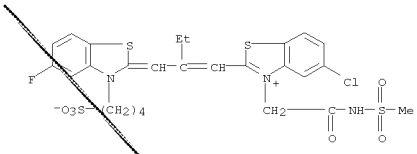
PRIORITY APPLN. INFO.: JP 2001-21719 A 20010130
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 137:177047
GI



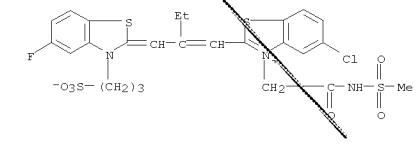
I

AB The invention relates to a photog. material comprised of at least one Ag halide photosensitive emulsion layer on a support, wherein the Ag halide emulsion contains at least two kinds of sensitizing dyes represented by I (X = O, S, Se, NR'; R, R' = alkyl, aryl, heterocycle; D = group for forming methine dye; M = counter ion; m ≥0). The Ag halide emulsion comprises ≥50 % Ag halide tabular grains with an aspect ratio of ≥2. The photog. material shows high sensitivity, excellent granularity, and reduced residual color upon fast processing.
IT 331229-77-7 364367-01-1
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(sensitizer; Ag halide photog. material containing more than two kinds of sensitizing dyes to improve photog. properties)
RN 331229-77-7 CAPLUS
CN Benzothiazolium, 5-chloro-2-[2-[[5-fluoro-3-(4-sulfobutyl)-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

L7 ANSWER 14 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 364367-01-1 CAPLUS
CN Benzothiazolium, 5-chloro-2-[2-[[5-fluoro-3-(3-sulfopropyl)-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



L7 ANSWER 15 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:487528 CAPLUS
DOCUMENT NUMBER: 137:63173
TITLE: Preparation of benzo[f]isoindoles which bind to the EP4 receptor
INVENTOR(S): Giblin, Gerard Martin Paul; Jones, Haydn Terence; Mason, Andrew McMurtrie; Miller, Neil Derek; Roomans, Susan; Shanahan, Stephen Edward; Walker, Ann Louise
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002050032	A1	20020627	WO 2001-GB5676	20011220

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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002016218	A	20020701	AU 2002-16218	20011220

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EP 1351934	A1	20031015	EP 2001-271355	20011220

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EP 1351934	B1	20070829		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2004517099	T	20040610	JP 2002-551529	20011220

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JP 4397586	B2	20100113		
AT 371645	T	20070915	AT 2001-271355	20011220

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ES 2290093	T3	20080216	ES 2001-271355	20011220

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US 20040102508	A1	20040527	US 2004-450891	20040130

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US 6924297	B2	20050802		
PRIORITY APPLN. INFO.:			GB 2000-31302 A	20001221

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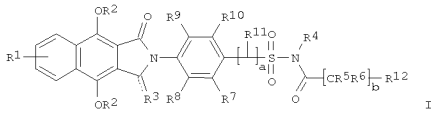
			WO 2001-GB5676 W	20011220

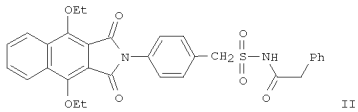
<--

OTHER SOURCE(S): MARPAT 137:63173
GI

L7 ANSWER 15 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



I



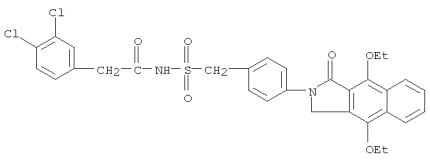
II

AB The title compds. [I; a = 0-1; b = 0-3; R1 = H, halo, alkyl, etc.; R2 = alkyl; R3 = H, O; R4 = H, alkyl; R5, R6 = H, halo, alkyl; or R5 and R6 are taken together to form a cyclopropyl ring; R7-R10 = H, alkyl, alkoxy, etc.; R11 = H, OH, halo, etc.; R12 = H, alkyl, Ph, etc.] which bind with high affinity to the EP4 receptor and are of use in the treatment of prevention of conditions such as a pain, inflammatory, immunol., bone, neurodegenerative or renal disorder, were prepared E.g., a multi-step synthesis of II which showed a pKi of 7.0 or greater at EP4 receptors, was given.

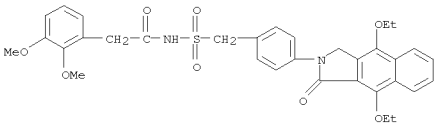
IT 439295-40-6P 439295-55-3P 439295-57-5P
439295-59-7P 439295-60-0P 439295-87-1P
439295-90-6P 439295-93-9P 439295-95-1P
439296-03-4P 439296-05-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzo[f]isoindoles which bind to the EP4 receptor)

RN 439295-40-6 CAPLUS
CN Benzeneacetamide, 3,4-dichloro-N-[[[4-(4,9-diethoxy-1,3-dihydro-1-oxo-2H-benz[f]isoindol-2-yl)phenyl]methyl]sulfonyl]- (CA INDEX NAME)

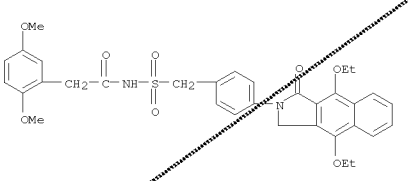
L7 ANSWER 15 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 439295-55-3 CAPLUS
CN Benzeneacetamide, N-[[[4-(4,9-diethoxy-1,3-dihydro-1-oxo-2H-benz[f]isoindol-2-yl)phenyl]methyl]sulfonyl]-2,3-dimethoxy- (CA INDEX NAME)

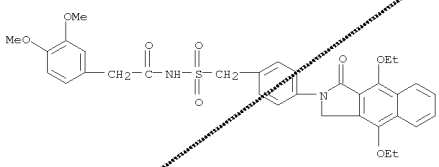


RN 439295-57-5 CAPLUS
CN Benzeneacetamide, N-[[[4-(4,9-diethoxy-1,3-dihydro-1-oxo-2H-benz[f]isoindol-2-yl)phenyl]methyl]sulfonyl]-2,5-dimethoxy- (CA INDEX NAME)

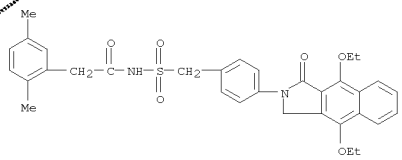


RN 439295-59-9 CAPLUS
CN Benzeneacetamide, N-[[[4-(4,9-diethoxy-1,3-dihydro-1-oxo-2H-benz[f]isoindol-2-yl)phenyl]methyl]sulfonyl]-3,4-dimethoxy- (CA INDEX NAME)

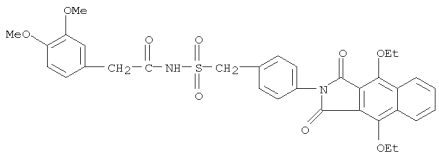
L7 ANSWER 15 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 439295-60-0 CAPLUS
CN Benzeneacetamide, N-[[[4-(4,9-diethoxy-1,3-dihydro-1-oxo-2H-benz[f]isoindol-2-yl)phenyl]methyl]sulfonyl]-2,5-dimethyl- (CA INDEX NAME)

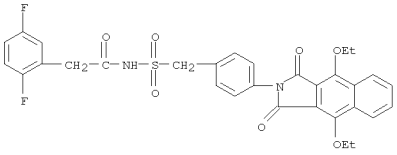


RN 439295-87-1 CAPLUS
CN Benzeneacetamide, N-[[[4-(4,9-diethoxy-1,3-dihydro-1,3-dioxo-2H-benz[f]isoindol-2-yl)phenyl]methyl]sulfonyl]-3,4-dimethoxy- (CA INDEX NAME)

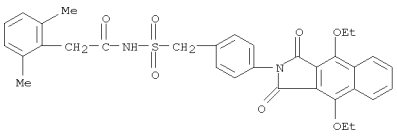


RN 439295-90-6 CAPLUS
CN Benzeneacetamide, N-[[[4-(4,9-diethoxy-1,3-dihydro-1,3-dioxo-2H-benz[f]isoindol-2-yl)phenyl]methyl]sulfonyl]-2,5-difluoro- (CA INDEX NAME)

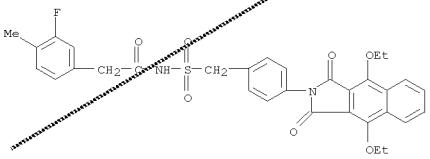
L7 ANSWER 15 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 439295-93-9 CAPLUS
CN Benzeneacetamide, N-[[[4-(4,9-diethoxy-1,3-dihydro-1,3-dioxo-2H-benz[f]isoindol-2-yl)phenyl]methyl]sulfonyl]-2,6-dimethyl- (CA INDEX NAME)

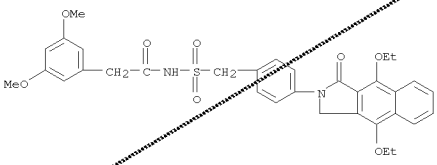


RN 439295-95-1 CAPLUS
CN Benzeneacetamide, N-[[[4-(4,9-diethoxy-1,3-dihydro-1,3-dioxo-2H-benz[f]isoindol-2-yl)phenyl]methyl]sulfonyl]-3-fluoro-4-methyl- (CA INDEX NAME)

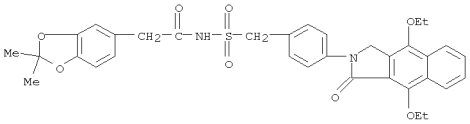


RN 439296-03-4 CAPLUS
CN Benzeneacetamide, N-[[[4-(4,9-diethoxy-1,3-dihydro-1-oxo-2H-benz[f]isoindol-2-yl)phenyl]methyl]sulfonyl]-3,5-dimethoxy- (CA INDEX NAME)

L7 ANSWER 15 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 439296-05-6 CAPLUS
CN 1,3-Benzodioxole-5-acetamide, N-[[[4-(4,9-diethoxy-1,3-dihydro-1-oxo-2H-benz[f]isoindol-2-yl)phenyl]methyl]sulfonyl]-2,2-dimethyl- (CA INDEX NAME)



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 16 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2002:446202 CAPLUS
DOCUMENT NUMBER: 137:22367
TITLE: Metal complex dye for a dye sensitized solar cell
INVENTOR(S): Watanabe, Tetsuya
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 35 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

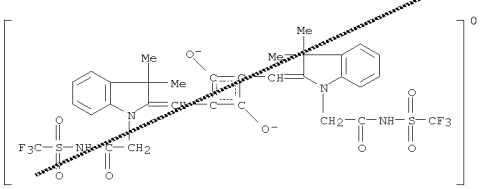
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1213776	A2	20020612	EP 2001-129122	20011207
EP 1213776	A3	20040317		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2002176188	A	20020621	JP 2000-375146	20001208
JP 4162116	B2	20081008		

PRIORITY APPLN. INFO.: JP 2000-375146 A 20001208

AB A photoelec. conversion device comprises a semiconductor fine particle sensitized by a dye having a proton dissociative imide group, and a photoelec. cell comprising the photoelec. conversion device is disclosed. A metal complex dye useful for the photoelec. conversion device is also provided.

IT 434339-64-7
RL: DEV (Device component use); USES (Uses)
(metal complex dye for dye sensitized solar cell)

RN 434339-64-7 CAPLUS
CN Cyclobutenediylium, 1,3-bis[[1,3-dihydro-3,3-dimethyl-1-[2-oxo-2-[[(trifluoromethyl)sulfonyl]amino]ethyl]-2H-indol-2-ylidene]methyl]-2,4-dihydroxy-, bis(inner salt) (9CI) (CA INDEX NAME)



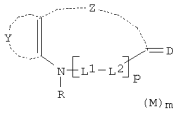
OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 16 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

L7 ANSWER 17 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2002:368929 CAPLUS
DOCUMENT NUMBER: 136:393179
TITLE: Silver halide color photographic film and paper comprising sensitizing methine dye
INVENTOR(S): Nakamura, Tetsuo; Hioki, Takanori; Ohzeki, Katsuhisa; Hanaki, Naoyuki
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan; Fujifilm Corporation
SOURCE: U.S. Pat. Appl. Publ., 75 pp., Cont.-in-part of U.S. Ser. No. 536,679.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20020058216	A1	20020516	US 2001-931309	20010817
US 7291449	B2	20071106		
JP 2002023295	A	20020123	JP 2001-118281	20010417

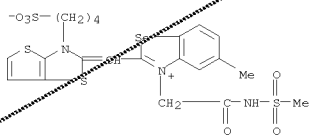
PRIORITY APPLN. INFO.:
JP 1999-89424 A 19990330
JP 2000-4868 A 20000113
US 2000-536679 A2 20000328
JP 2001-118281 A 20010417
JP 2000-124612 A 20000425
JP 2000-132357 A 20000501
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 136:393179
GI



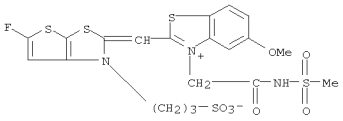
(M)m I

AB Disclosed is a silver halide color photog. film and paper which comprise at least one methine dye represented by the following formula I (Y = furan

L7 ANSWER 17 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
ring, pyrrole ring, Y may be condensed with other 5- or 6-membered carbocyclic or heterocyclic ring; Z = at. group necessary to form a 5- or 6-membered nitrogen-contg. heterocyclic ring, Z may further be condensed with other 5- or 6-membered carbocyclic or heterocyclic ring; R = alkyl, aryl, heterocyclic; D = group necessary to form a methine dye; L1, L2 = methine group; p = 0, 1; M = counter ion; m = no. necessary to neutralize the charge in the mol). High sensitivity and excellent residual color effect can be obtained by the constitution of the present invention.
IT 391879-65-5 391879-84-8 391879-85-9
391879-89-3 425621-07-4
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(sensitizing dye; color photog. film and paper comprising sensitizing methine dye)
RN 391879-65-5 CAPLUS
CN Benzoselenazolium, 5-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2-[[3-(4-sulfobutyl)thieno[2,3-d]thiazol-2(3H)-ylidene]methyl]-, inner salt (9CI) (CA INDEX NAME)

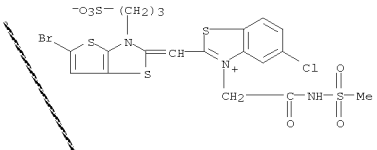


RN 391879-84-8 CAPLUS
CN Benzothiazolium, 2-[[5-fluoro-1-(3-sulfopropyl)thieno[3,2-d]thiazol-2(1H)-ylidene]methyl]-5-methoxy-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

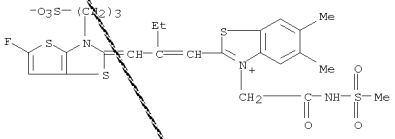


RN 391879-85-9 CAPLUS
CN Benzothiazolium, 2-[[5-bromo-3-(3-sulfopropyl)thieno[2,3-d]thiazol-2(3H)-ylidene]methyl]-5-chloro-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

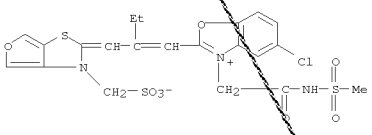
L7 ANSWER 17 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 391879-89-3 CAPLUS
CN Benzothiazolium, 2-[2-[[5-fluoro-3-(3-sulfopropyl)thieno[2,3-d]thiazol-2(3H)-ylidene]methyl]-1-buten-1-yl]-5,6-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



RN 425621-07-4 CAPLUS
CN Benzoxazolium, 5-chloro-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2-[2-[[3-(sulfomethyl)furo[3,4-d]thiazol-2(3H)-ylidene]methyl]-1-buten-1-yl]-, inner salt (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

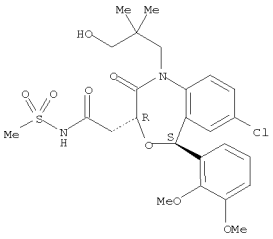
L7 ANSWER 18 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2002:368342 CAPLUS
DOCUMENT NUMBER: 136:359669
TITLE: High-density lipoprotein-cholesterol level elevating agent
INVENTOR(S): Nishimoto, Tomoyuki; Tozawa, Ryuichi; Kori, Masakuni; Amano, Yuichiro
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 111 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002038180	A1	20020516	WO 2001-JP9802	20011109
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2428669	A1	20020516	CA 2001-2428669	20011109
AU 2002012741	A	20020521	AU 2002-12741	20011109
JP 2002205956	A	20020723	JP 2001-344074	20011109
JP 4138299	B2	20080827		
EP 1332763	A1	20030806	EP 2001-981043	20011109
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 20040063750	A1	20040401	US 2003-416239	20030506
US 20080058310	A1	20080306	US 2007-810887	20070607

PRIORITY APPLN. INFO.:
JP 2000-342607 A 20001109
WO 2001-JP9802 W 20011109
US 2003-416239 A1 20030506
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 136:359669
AB Disclosed is a novel high-d. lipoprotein (HDL)-cholesterol level elevating agent containing a compound which has a squalene synthase inhibitory effect.
The HDL-cholesterol-elevating effect of N-[[(3R,5S)-1-(3-acetoxy-2,2-dimethylpropyl)-7-chloro-5-(2,3-dimethoxyphenyl)-2-oxo-1,2,3,5-tetrahydro-4,1-benzoxazepine-3-yl]acetyl]piperidine-4-acetic acid (I) in common marmoset was examined

L7 ANSWER 18 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
Also, a tablet contg. I 50, D-mannitol 50, corn starch 33.9, croscarmellose sodium 40, hydroxypropyl cellulose 5.5, and magnesium stearate 0.6 mg was prepd.
IT 189059-84-5 189059-85-6 189060-07-9
189060-45-5 383652-05-9
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(high-d. lipoprotein-cholesterol level elevating agents containing squalene synthase inhibitors)
RN 189059-84-5 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-1-(3-hydroxy-2,2-dimethylpropyl)-N-(methylsulfonyl)-2-oxo-, (3R,5S)- (CA INDEX NAME)

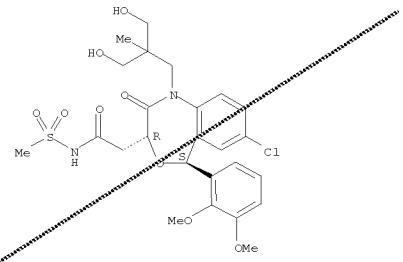
Absolute stereochemistry.



RN 189059-85-6 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-1-[3-hydroxy-2-(hydroxymethyl)-2-methylpropyl]-N-(methylsulfonyl)-2-oxo-, (3R,5S)- (CA INDEX NAME)

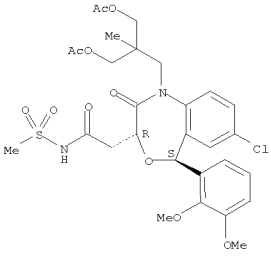
Absolute stereochemistry.

L7 ANSWER 18 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



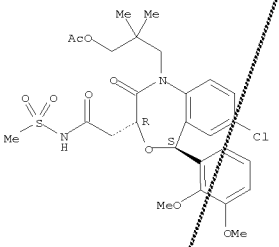
RN 189060-07-9 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 1-[3-(acetyloxy)-2-[(acetyloxy)methyl]-2-methylpropyl]-7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-N-(methylsulfonyl)-2-oxo-, (3R,5S)- (CA INDEX NAME)

Absolute stereochemistry.



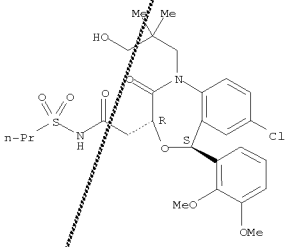
RN 189060-45-5 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 1-[3-(acetyloxy)-2,2-dimethylpropyl]-7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-N-(methylsulfonyl)-2-oxo-, (3R,5S)- (CA INDEX NAME)

L7 ANSWER 18 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
Absolute stereochemistry.



RN 383652-05-9 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-1-(3-hydroxy-2,2-dimethylpropyl)-2-oxo-N-(propylsulfonyl)-, (3R,5S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

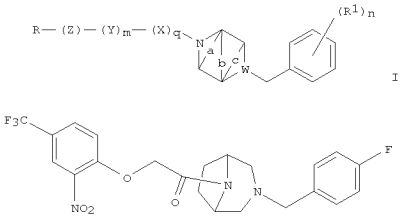
L7 ANSWER 19 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2002:314940 CAPLUS
DOCUMENT NUMBER: 136:340711
TITLE: Bridged piperazine derivatives, specifically 3,8-diazabicyclo[3.2.1]octane, 8-azabicyclo[3.2.1]octane, 2,5-diazabicyclo[2.2.2]octane, and 3,9-diazabicyclo[3.3.1]nonane derivatives, useful as inhibitors of chemokines binding to CCR1 receptors, for treating inflammation and other immune disorders.
INVENTOR(S): Blumberg, Laura Cook; Brown, Matthew Frank; Glaude, Ronald Paul; Poss, Christopher Stanley
PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: PCT Int. Appl., 89 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002032901 <--	A2	20020425	WO 2001-IB1844	20011004
WO 2002032901	A3	20020725		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2423789 <--	A1	20020425	CA 2001-2423789	20011004
AU 2001092160 <--	A	20020429	AU 2001-92160	20011004
EP 1326867 <--	A2	20030716	EP 2001-972389	20011004
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
EE 200300189 <--	A	20031015	EE 2003-189	20011004
BR 2001014697 <--	A	20031118	BR 2001-14697	20011004
HU 2003001442 <--	A2	20031229	HU 2003-1442	20011004
HU 2003001442	A3	20070328		
JP 2004511558 <--	T	20040415	JP 2002-536283	20011004
NZ 524742 <--	A	20041224	NZ 2001-524742	20011004
US 20020119961 <--	A1	20020829	US 2001-972177	20011005
IN 2003MN00309 <--	A	20050211	IN 2003-MN309	20030317
ZA 2003002157 <--	A	20040422	ZA 2003-2157	20030318

L7 ANSWER 19 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

BG 107655	A	20040130	BG 2003-107655		20030320
<--					
NO 2003001572	A	20030610	NO 2003-1572		20030408
<--					
MX 2003003475	A	20030714	MX 2003-3475		20030416
<--					
PRIORITY APPLN. INFO.:			US 2000-241804P	P	20001019
<--					
			WO 2001-IB1844	W	20011004
<--					

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 136:340711
GI



I

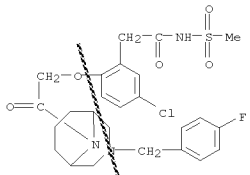
II

AB Compds. I and their pharmaceutically acceptable salts, useful for treatment of inflammation and other immune disorders, are disclosed [wherein: n = 1-5; m = 1-5; q = 0-1; a, b, c = (CH2)0-4 (independently); a, b, and c cannot all be null; if a and/or c is not null, then b must be null; W = CH or N; X = CO, C(S), or CH2; Y = CH2; Z = O, (un)substituted NH or (un)substituted CH2; R = certain (un)substituted (hetero)aryl or (hetero)cycloalkyl; R1 = (independently) H, OH, SO3H, halo, alkyl, SH, CF3, wide variety of other substituents]. The compds. are useful for treatment of a wide variety of diseases and disorders, which are cited specifically in claims. Approx. 100 specific examples of I are given, many with synthetic details. For example, 3-(4-fluorobenzyl)-3,8-diazabicyclo[3.2.1]octan-2-one (preparation given) underwent a sequence of: (1) reduction of the amide carbonyl using LiAlH4 (94%); (2) 8-N-acylation with chloroacetyl chloride (69%); and (3) etherification with 2-nitro-4-trifluoromethylphenol (58%), to give title compound II. In a bioassay for the ability to inhibit chemotaxis of various cells (THP-1 cells, primary human monocytes, or primary lymphocytes) in vitro, all example compds. had IC50 values of less than 10 μM.

L7 ANSWER 19 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

IT 417727-33-4P, N-[[5-Chloro-2-[2-[3-(4-fluorobenzyl)-3,9-diazabicyclo[3.3.1]non-9-yl]-2-oxoethoxy]phenyl]acetyl]methanesulfonamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of bridged piperazine derivs. as inhibitors of chemokines binding to CCR1 receptors)

RN 417727-33-4 CAPLUS
CN Benzeneacetamide, 5-chloro-2-[2-[3-[(4-fluorophenyl)methyl]-3,9-diazabicyclo[3.3.1]non-9-yl]-2-oxoethoxy]-N-(methylsulfonyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 20 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER:	2002:99047 CAPLUS
DOCUMENT NUMBER:	136:158761
TITLE:	Heat developable photographic films containing specific sensitizing dye
INVENTOR(S):	Hioki, Takanori; Kato, Takashi; Ozeki, Tomoyuki; Hanaki, Naoyuki
PATENT ASSIGNEE(S):	Fuji Photo Film Co., Ltd., Japan
SOURCE:	Jpn. Kokai Tokkyo Koho, 52 pp. CODEN: JKXXAF
DOCUMENT TYPE:	Patent
LANGUAGE:	Japanese
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

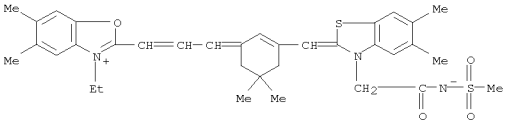
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002040591	A	20020206	JP 2000-219957	20000721
<--				
PRIORITY APPLN. INFO.:			JP 2000-219957	20000721
<--				

OTHER SOURCE(S): MARPAT 136:158761

AB The invention relates to a heat-developable film containing a light-sensitive silver halides, heat-insensitive organic silver salts, a reducing agent, and a binder on a support, wherein the film also contains sensitizing dye (dye1)-(R1)q M1m1 (dye1 = dye residue; M1 = counter ion; m1 = charge-neutralizing charge number; q ≥1 integer; R1 = group containing -CONSO2-, -SO2-NCO-, -CONCO-, or -SO2NSO2-). The film provides the good image d. under various temperature and humidity.

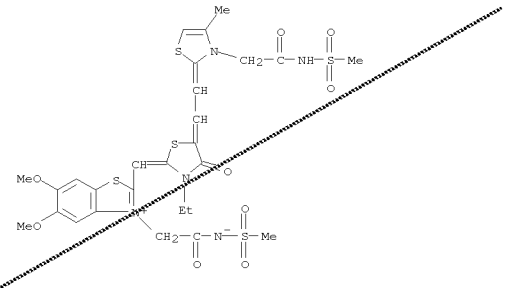
IT 395662-15-4P 395662-30-3P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(sensitizing dye in heat-developable photog. films)

RN 395662-15-4 CAPLUS
CN Benzoxazolium, 2-[3-[3-[[5,6-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2(3H)-benzothiazolylidene]methyl]-5,5-dimethyl-2-cyclohexen-1-ylidene]-1-propen-1-yl]-3-ethyl-5,6-dimethyl-, inner salt (CA INDEX NAME)



RN 395662-30-3 CAPLUS
CN Benzothiazolium, 2-[[3-ethyl-5-[2-[4-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2(3H)-thiazolylidene]ethylidene]-4-oxo-2-thiazolidinylidene]methyl]-5,6-dimethoxy-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

L7 ANSWER 20 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



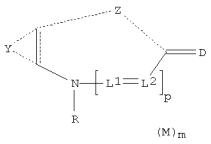
L7 ANSWER 21 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2002:61857 CAPLUS
DOCUMENT NUMBER: 136:142540
TITLE: Photographic film containing specific methine dye
INVENTOR(S): Nakamura, Akio; Hioki, Takanori; Ozeki, Katsuhisa; Hanaki, Naoyuki
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 109 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002023295	A	20020123	JP 2001-118281	20010417
US 20020058216	A1	20020516	US 2001-931309	20010817
US 7291449	B2	20071106		
EP 1251395	A1	20021023	EP 2001-124350	20011023

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.:	JP 2000-124612	A	20000425
	JP 2000-132357	A	20000501
	JP 1999-89424	A	19990330
	JP 2000-4868	A	20000113
	US 2000-536679	A2	20000328
	JP 2001-118281	A	20010417

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 136:142540
GI

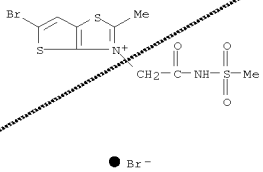


I

L7 ANSWER 21 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

AB The invention relates to photog. films containing methine dye I (Y = 5-6 membered unsat. heterocyclic ring residue; Z = 5-6 membered unsat. heterocyclic ring residue, connecting group; R = alkyl, aryl, heterocyclics; D = dye functional group; L1-2 = methine; p = 0,1; M = counter ion; m = number to neutralize charge in compound). The photog. film provides the high sensitivity and little residual color after the process without detracting the pressure durability.

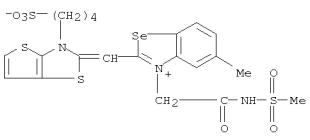
IT 391879-39-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(photog. film containing specific methine dye)
RN 391879-39-3 CAPLUS
CN Thieno[2,3-d]thiazolium, 5-bromo-2-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)



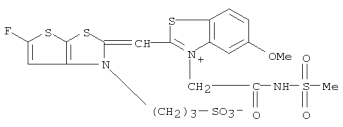
● Br⁻

IT 391879-65-5P 391879-84-8P 391879-85-9P
391879-89-3P 391880-08-3P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photog. film containing specific methine dye)
RN 391879-65-5 CAPLUS
CN Benzoselenazolium, 5-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2-[[3-(4-sulfobutyl)thieno[2,3-d]thiazol-2(3H)-ylidene]methyl]-, inner salt (9CI) (CA INDEX NAME)

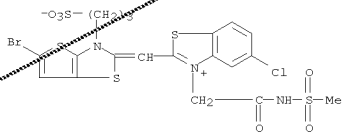
L7 ANSWER 21 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 391879-84-8 CAPLUS
CN Benzothiazolium, 2-[[5-fluoro-1-(3-sulfopropyl)thieno[3,2-d]thiazol-2(1H)-ylidene]methyl]-5-methoxy-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

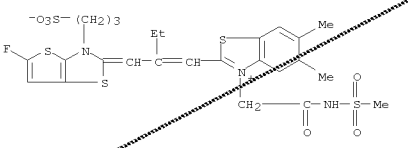


RN 391879-85-9 CAPLUS
CN Benzothiazolium, 2-[[5-bromo-3-(3-sulfopropyl)thieno[2,3-d]thiazol-2(3H)-ylidene]methyl]-5-chloro-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

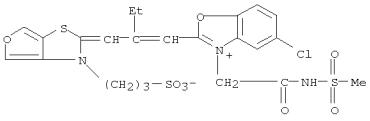


RN 391879-89-3 CAPLUS
CN Benzothiazolium, 2-[2-[[5-fluoro-3-(3-sulfopropyl)thieno[2,3-d]thiazol-2(3H)-ylidene]methyl]-1-buten-1-yl]-5,6-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

L7 ANSWER 21 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



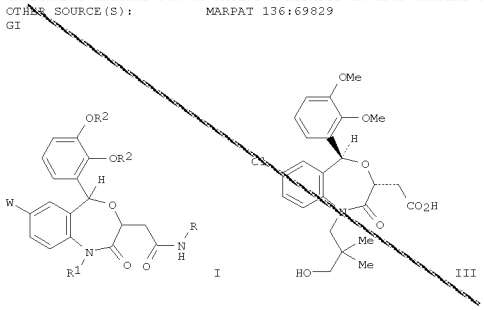
RN 391880-08-3 CAPLUS
CN Benzoxazolium, 5-chloro-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2-[2-[[3-(3-sulfopropyl)furo[3,4-d]thiazol-2(3H)-ylidene]methyl]-1-buten-1-yl]-, inner salt (CA INDEX NAME)



L7 ANSWER 22 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2001:935587 CAPLUS
DOCUMENT NUMBER: 136:69829
TITLE: Preparation of dialkoxyphenyloxobenzoxazepineacetamide squalene synthase inhibitors as antihyperlipidemic and antihypercholesteremic agents
INVENTOR(S): Kori, Masakuni; Miki, Takashi; Nishimoto, Tomoyuki; Tozawa, Ryuichi
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd, Japan
SOURCE: PCT Int. Appl., 643 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001098282	A1	20011227	WO 2001-JP5347	20010622
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2413429	A1	20011227	CA 2001-2413429	20010622
AU 2001074588	A	20020102	AU 2001-74588	20010622
JP 2002080468	A	20020319	JP 2001-189417	20010622
JP 2003064063	A	20030305	JP 2002-233086	20010622
EP 1292585	A1	20030319	EP 2001-941174	20010622
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001011835	A	20030429	BR 2001-11835	20010622
HU 2003001301	A2	20030828	HU 2003-1301	20010622
US 20030078251	A1	20030424	US 2002-203524	20020809
ZA 2002009055	A	20031107	ZA 2002-9055	20021107
MX 2002012481	A	20030606	MX 2002-12481	20021216
NO 2002006164	A	20021220	NO 2002-6164	20021220

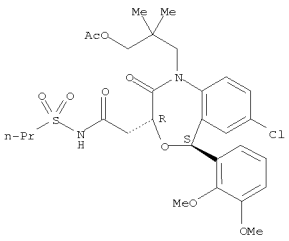
L7 ANSWER 22 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
PRIORITY APPLN. INFO.: JP 2000-190253 A 20000623
JP 2001-189417 A3 20010622
WO 2001-JP5347 W 20010622
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 136:69829
GI



AB Alkoxyphenyloxobenzoxazepineacetamides [I; R = (un)substituted 1-carboxyethyl, (un)substituted carboxyalkyl, sulfonylalkyl, (carboxycycloalkyl)alkyl, etc.; R1 = alkyl (un)substituted with alkanoyloxy or OH groups (if R = (un)substituted 1-carboxyethyl, alkyl, 4-carboxycyclohexylmethyl, or 4-carboxyphenylmethyl, then R1 must be substituted with a OH or alkanoyloxy group); R2 = lower alkyl; W = halogen] are prepared as squalene synthase inhibitors for the treatment of hyperlipidemia and the decrease of serum triglycerides and lipids. (3R, 4S)-I [R = Me(CH2)2SO2; R1 = HOCH2C(Me)2CH2; R2 = Me; W = Cl] (II) was prepared in 3 steps from hydroxyacid (III) by acetylation of the hydroxyl group with acetic anhydride, treatment of the acid with thionyl chloride in THF to generate the acid chloride in situ, and addition of the mixture to a solution of PrSO2NH2 in THF to provide the acetylated methoxyphenyloxobenzoxazepineacetamide I [R = PrSO2; R1 = AcOCH2C(Me)2CH2; R2 = Me; W = Cl]; hydrolysis of the acetoxy group with aqueous sodium hydroxide and ethanol provides II. Data for the inhibition of squalene synthase by I are given. Pharmaceutical compns. containing I [R = 3-(HO2CCH2CH2)C6H4; R1 = HOCH2CMe2CH2; R2 = Me; W = Cl] are specified.
IT 383653-04-1P 383653-14-3P 383653-20-1P
383653-31-4P 383653-40-5P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(title compds.; prepn. of dialkoxyphenyloxobenzoxazepineacetamide squalene synthase inhibitors as antihyperlipidemic and antihypercholesteremic agents)

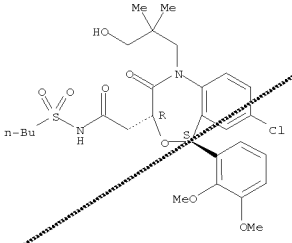
RN 383653-04-1 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 1-[3-(acetyloxy)-2,2-dimethylpropyl]-7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-2-oxo-N-(propylsulfonyl)-, (3R,5S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



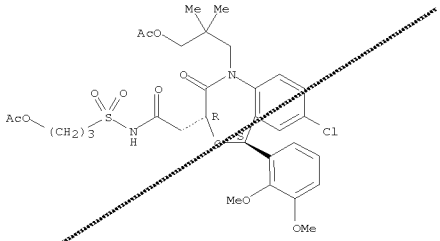
RN 383653-14-3 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, N-(butylsulfonyl)-7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-1-(3-hydroxy-2,2-dimethylpropyl)-2-oxo-, (3R,5S)- (CA INDEX NAME)

Absolute stereochemistry.



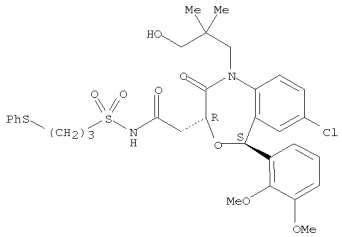
RN 383653-20-1 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 1-[3-(acetyloxy)-2,2-dimethylpropyl]-N-[[3-(acetyloxy)propyl]sulfonyl]-7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-2-oxo-, (3R,5S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 383653-31-4 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-1-(3-hydroxy-2,2-dimethylpropyl)-2-oxo-N-[[3-(phenylthio)propyl]sulfonyl]-, (3R,5S)- (CA INDEX NAME)

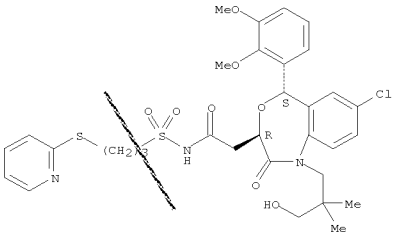
Absolute stereochemistry. Rotation (-).



RN 383653-40-5 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-1-(3-hydroxy-2,2-dimethylpropyl)-2-oxo-N-[[3-(2-pyridinylthio)propyl]sulfonyl]-, (3R,5S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

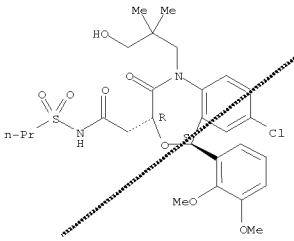
L7 ANSWER 22 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



IT 383652-05-9P 383653-09-6P 383653-25-6P
383653-35-8P 383653-45-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(title compds.; preparation of dialkoxyphenyloxobenzoxazepineacetamide squalene synthase inhibitors as antihyperlipidemic and antihypercholesteremic agents)

RN 383652-05-9 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-1-(3-hydroxy-2,2-dimethylpropyl)-2-oxo-N-(propylsulfonyl)-, (3R,5S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

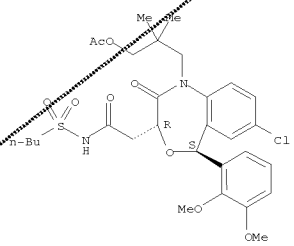


RN 383653-09-6 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 1-[3-(acetyloxy)-2,2-dimethylpropyl]-N-

L7 ANSWER 22 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

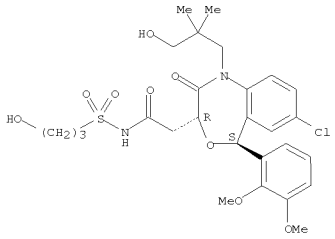
(butylsulfonyl)-7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-2-oxo-, (3R,5S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 383653-25-6 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-1-(3-hydroxy-2,2-dimethylpropyl)-N-[(3-hydroxypropyl)sulfonyl]-2-oxo-, (3R,5S)- (CA INDEX NAME)

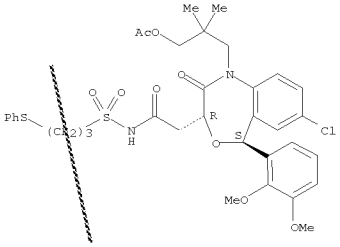
Absolute stereochemistry. Rotation (-).



RN 383653-35-8 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 1-[3-(acetyloxy)-2,2-dimethylpropyl]-7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-2-oxo-N-[[3-(phenylthio)propyl]sulfonyl]-, (3R,5S)- (CA INDEX NAME)

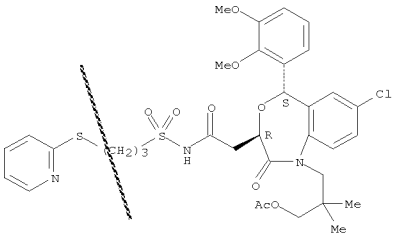
L7 ANSWER 22 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

Absolute stereochemistry. Rotation (-).



RN 383653-45-0 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 1-[3-(acetyloxy)-2,2-dimethylpropyl]-7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-2-oxo-N-[[3-(2-pyridinylthio)propyl]sulfonyl]-, (3R,5S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD
(11 CITINGS)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 23 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

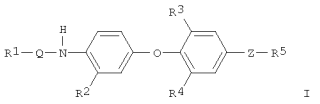
ACCESSION NUMBER: 2001:935563 CAPLUS
DOCUMENT NUMBER: 136:54021
TITLE: Thyroid receptor ligands, namely 3,5-dichloro-4-(3-bromo-4-amidophenoxy)phenylacetic acids and analogs, pharmaceutical compositions comprising them, and their use in the treatment of disorders influenced by thyroid hormones
INVENTOR(S): Li, Yi-Lin; Malm, Johan; Litten, Chris; Garcia Collazo, Ana Maria; Garg, Neeraj
PATENT ASSIGNEE(S): Karo Bio AB, Swed.
SOURCE: PCT Int. Appl., 86 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001098256	A1	20011227	WO 2001-EP6815	20010615
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2412161	A1	20011227	CA 2001-2412161	20010615
CA 2412161	C	20090317		
EP 1296936	A1	20030402	EP 2001-951600	20010615
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004501132	T	20040115	JP 2002-504212	20010615
AU 779880	B2	20050217	AU 2001-72484	20010615
US 20040097589	A1	20040520	US 2003-311524	20030422
US 7199265	B2	20070403		

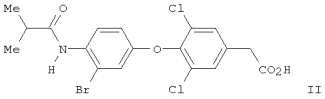
PRIORITY APPLN. INFO.: GB 2000-15205 A 20000621
WO 2001-EP6815 W 20010615

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 136:54021
GI

L7 ANSWER 23 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



I



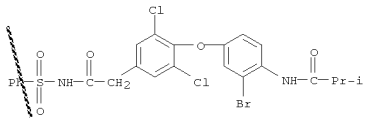
II

AB The invention relates to compds. I or pharmaceutically acceptable salts thereof [wherein: R1 = (un)substituted aryl, heteroaryl, alk(en/yn)yl, cycloalkyl; R2 = H, halo, NO2, CN, aryl, heteroaryl, alk(en/yn)yl, cycloalkyl; R1 can be linked to R2, thus forming an (un)substituted aza-containing C5-8 heterocyclic ring; Q = CO, SO, SO2, NHCS, or NHCO; R3, R4 = halo, (un)substituted alk(en/yn)yl, cycloalkyl, or bioisosteric equivalent; Z = (CH2)n, CH:CH, O(CH2)m, or NH(CH2)m; n = 0, 1, 2, or 3; m = 1 or 2; R5 = CO2H, PO(OH)2, PO(OH)NH2, SO2OH, CONHOH, NHCOCO2H, NHCOCH2CO2H, CONHSO2R', or CONR'R'' (R' and R'' not explicitly defined) where the amine portion is derived from an L- or D-amino acid or a mixture; or any other possible bioisosteric equivalent of all the groups above; including all stereoisomers, and prodrug esters]. Also disclosed are methods of preparing I, and methods for using them, such as in the regulation of metabolism I are thyroid receptor ligands, and are preferably selective for the thyroid hormone receptor β. Over 80 examples are given. For instance, 3,5-dichloro-4-(3-bromo-4-isobutyramidophenoxy)phenylacetic acid (II) was prepared in 9 steps as follows: (1) bromination of 2,6-dichlorophenol in the 4-position (85%), (2) etherification with 4-fluoronitrobenzene (45%), (3) coupling of the bromide with HC.tplbond.CSiMe3 (53%), (4) desilylation and oxidation to an acid, (5) conversion to the Me ester, (6) hydrogenation of the nitro group, (7) ring bromination adjacent to amino (57%), (8) amidation of the amino group with isobutyryl chloride (40%), and (9) alkaline hydrolysis of the ester (82%). Compds. I of the examples bound to thyroid receptor β with IC50 values of 0.2 nM to 10,000 nM.

IT 383180-96-9P, N-[[3,5-Dichloro-4-(3-bromo-4-isobutyramidophenoxy)phenyl]acetyl]benzenesulfonamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of dichloro(bromoamidophenoxy)phenylacetic acids and analogs as thyroid hormone receptor ligands)

RN 383180-96-9 CAPLUS

CN Benzeneacetamide, 4-[3-bromo-4-[(2-methyl-1-oxopropyl)amino]phenoxy]-3,5-dichloro-N-(phenylsulfonyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 24 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:814242 CAPLUS
DOCUMENT NUMBER: 135:350442
TITLE: Silver halide photographic emulsions with high sensitivity and their photographic materials for fast development
INVENTOR(S): Nakamura, Akio; Hioki, Takanori
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 55 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001312023	A	20011109	JP 2000-132280	20000501
CN 1322965	A	20011121	CN 2001-115707	20010429
CN 1229688	C	20051130		
US 20020012891	A1	20020131	US 2001-845355	20010501
US 6762015	B2	20040713		

PRIORITY APPLN. INFO.: JP 2000-132280 A 20000501

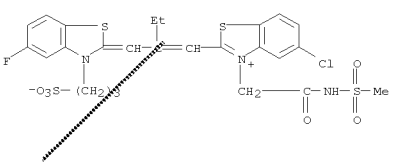
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 135:350442

AB The photog. emulsions preventing fog in fast development, contain ≥2 color sensitizing dyes Dye(ArQ)pMm [Dye = dye part (cyanine dye, etc.); A = linking group; Q = dissociable group, at least one of them is not SO3H; M = counter ion; r = 0, 1; q ≥1; m ≥0 (for neutralizing intramol. charges)]. The emulsions may be chemical sensitized by Se compds. and may contain tabular silver halide grains.

IT 364367-01-1
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(photog. dye sensitizers for antifogging silver halide emulsions)

RN 364367-01-1 CAPLUS

CN Benzothiazolium, 5-chloro-2-[2-[[5-fluoro-3-(3-sulfopropyl)-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



L7 ANSWER 25 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:729885 CAPLUS
DOCUMENT NUMBER: 135:296112
TITLE: Color photographic emulsion with improved solution storage stability and color photographic paper with high sensitivity and image graininess
INVENTOR(S): Ohzeki, Katsuhisa; Nakamura, Tetsuo; Hioki, Takanori
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 91 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

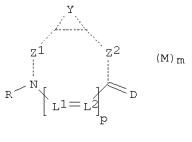
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1139164	A1	20011004	EP 2001-107512	20010326
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001343719	A	20011214	JP 2000-91825	20000329
JP 2001343724	A	20011214	JP 2000-238642	20000807
JP 4115076	B2	20080709		
JP 2001343721	A	20011214	JP 2000-270117	20000906
JP 2001343722	A	20011214	JP 2000-292446	20000926
JP 4253428	B2	20090415		
JP 2001343723	A	20011214	JP 2001-85556	20010323
US 20020110764	A1	20020815	US 2001-816062	20010326
US 6566044	B2	20030520		
CN 1316674	A	20011010	CN 2001-117899	20010327
CN 1221851	C	20051005		
CN 1347006	A	20020501	CN 2001-142235	20010925
CN 1228684	C	20051123		
US 20020072019	A1	20020613	US 2001-960981	20010925
US 6649336	B2	20031118		

PRIORITY APPLN. INFO.: JP 2000-86489 A 20000327
JP 2000-91825 A 20000329
JP 2000-238642 A 20000807
JP 2000-292446 A 20000926

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 135:296112

GI

L7 ANSWER 25 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



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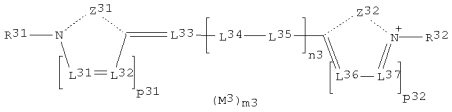


II

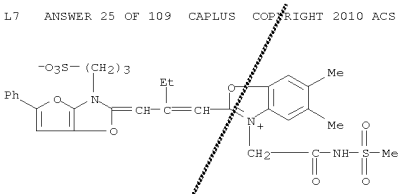
AB The purpose of the present invention is to provide silver halide photog. materials that are excellent in photog. speed as well as image graininess and exhibit low residual color even after rapid processing. A silver halide photog. material comprises a compound represented by formula I (Y = group necessary to form heterocyclic ring or a benzene ring; Z1, Z2 = group or a single bond necessary to form a nitrogen-containing heterocyclic ring; R = alkyl, aryl, heterocyclic ring; L1, L2 = methine; p = 0-1; M = counter ion; m = 0-1; D = group necessary to form a methine dye), and a compound represented by formula II (R31, R32 = alkyl, aryl, heterocyclic ring; L31- L37 = methine group; p31, p32 = 0-1; n3 = 0-4; M3 = counter ion; m3 = 0-1; Z31, Z32 = group necessary to form a nitrogen-containing heterocyclic ring).

IT 364366-98-3 364367-01-1
RL: TEM (Technical or engineered material use); USES (Uses)
(sensitizing dye; color photog. emulsion with improved solution storage stability and color photog. paper with high sensitivity and image graininess)

RN 364366-98-3 CAPLUS

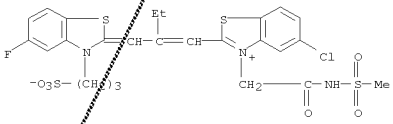
CN Benzoxazolium, 5,6-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2-[2-[[5-phenyl-3-(3-sulfopropyl)furo[2,3-d]oxazol-2(3H)-ylidene]methyl]-1-buten-1-yl]-, inner salt (CA INDEX NAME)

L7 ANSWER 25 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 364367-01-1 CAPLUS

CN Benzothiazolium, 5-chloro-2-[2-[[5-fluoro-3-(3-sulfopropyl)-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 26 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:252935 CAPLUS
DOCUMENT NUMBER: 134:280607
TITLE: Preparation of acyl sulfonamide derivatives as selective inhibitors of human chymase
INVENTOR(S): Aoyama, Yukio; Seki, Masaki; Masuda, Hirokazu; Usui, Yoshihiro; Abe, Yuji; Shimada, Mayumi; Yamamoto, Michiya
PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001097946	A	20010410	JP 1999-278376	19990930

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PRIORITY APPLN. INFO.: JP 1999-278376 19990930
<--
OTHER SOURCE(S): MARPAT 134:280607

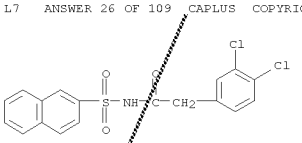
AB The title compds. represented by formula R1CH(XR2)CONHSO2R3 [R1 = (un)substituted Ph, naphthyl, H; R2 = halo, alkoxy, NH2, acyl, cyano, CO2H, NO2, (un)substituted Ph, H; provided that R1 and R2 are not simultaneously H; R3 = (un)substituted aryl; X = O, S(O)n; wherein n = 0-2], pharmacol. acceptable salts thereof or hydrates or solvates thereof are prepared These compds. are useful for the prevention and/or treatment of hypertension, ischemic heart failure, myocardial diseases, arteriosclerosis, coronary arterial diseases, myocardial infarction, vascular restenosis after angioplasty or thrombolytic therapy, peripheral circulation disorders, angiitis, diabetic or non-diabetic nephropathy, pulmonary hypertension, bronchial asthma, chronic obtrusive lung diseases, chronic bronchitis, pulmonary emphysema, allergic rhinitis, atopic dermatitis, rheumatism, arthritis, or cancer (no data). Thus, a solution of diphenylacetic acid in THF was added dropwise to a solution of 1,1'-carbonyldiimidazole in THF, stirred at 25° for 0.5 h. refluxed fro 0.5 h, and cooled to 25°, followed by adding dropwise a solution of 2-naphthalenesulfonamide and 1,8-diazabicyclo[5.4.0]-7-undecene in THF, and the resulting mixture was stirred at 25° overnight to give 95% N-(2-naphthalenesulfonyl)diphenylacetamide, i.e. N-(diphenylacetyl)-2-naphthalenesulfonamide.

IT 333335-12-9P, N-(2-Naphthalenesulfonyl)-2-(3,4-dichlorophenyl)acetamide 333335-13-0P, N-(2-Naphthalenesulfonyl)-2-(2,4-dichlorophenyl)acetamide
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of acyl sulfonamide derivs. as selective inhibitors of human chymase and preventives or therapeutics for chymase-related diseases)

RN 333335-12-9 CAPLUS

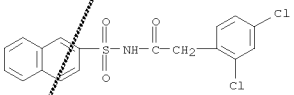
CN Benzeneacetamide, 3,4-dichloro-N-(2-naphthalenylsulfonyl)- (CA INDEX NAME)

L7 ANSWER 26 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 333335-13-0 CAPLUS

CN Benzeneacetamide, 2,4-dichloro-N-(2-naphthalenylsulfonyl)- (CA INDEX NAME)



L7 ANSWER 27 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2001:247309 CAPLUS
DOCUMENT NUMBER: 134:280845
TITLE: Preparation of acylsulfonamide derivatives as chymase inhibitors
INVENTOR(S): Aoyama, Yukio; Seki, Maki; Masuda, Hirokazu; Uzui, Yoshihiro; Abe, Yuji; Shimada, Mayumi; Yamamoto, Mutsuya
PATENT ASSIGNEE(S): Mitsubishi Chemical Corporation, Japan
SOURCE: PCT Int. Appl., 259 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001023349	A1	20010405	WO 2000-JP6695	20000928

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: JP 1999-278374 A 19990930
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JP 1999-278375 A 19990930
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JP 1999-278377 A 19990930
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JP 1999-278378 A 19990930
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JP 1999-278379 A 19990930
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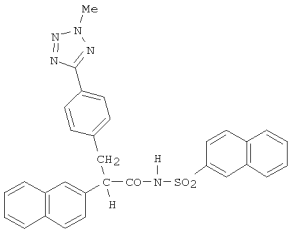
OTHER SOURCE(S): MARPAT 134:280845
GI

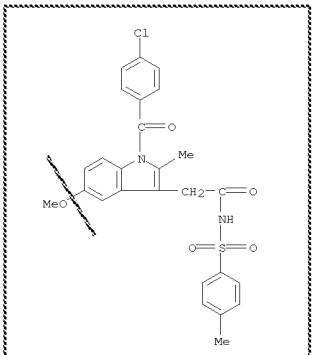
L7 ANSWER 27 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



I

AB The title compds. R1CH[(CH2R2)n](NH)mCONHSO2R3 [R1 = (un)substituted heterocyclyl, etc.; n = 1 -4; m = 0 or 1; R2 = (un)substituted heterocyclyl, etc.; when R2 is (un)substituted aryl, R3 is (un)substituted naphthyl, heterocyclyl; when R2 is (un)substituted heterocyclyl, R3 is (un)substituted Ph, naphthyl, heterocyclyl] are prepared The title compds. are useful as remedies for hypertension. The title compound I in vitro showed IC50 of 0.66 μM against chymase.
IT 76812-31-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of acylsulfonamide derivs. as chymase inhibitors)
RN 76812-31-2 CAPLUS
CN 1H-Indole-3-acetamide, 1-(4-chlorobenzoyl)-5-methoxy-2-methyl-N-[(4-methylphenyl)sulfonyl]- (CA INDEX NAME)

L7 ANSWER 27 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 28 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2001:210100 CAPLUS
DOCUMENT NUMBER: 134:259141
TITLE: Silver halide photographic material with reduced dye stain
INVENTOR(S): Nakamura, Akio; Morimura, Kimiyasu
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 41 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001075224	A	20010323	JP 1999-246122	19990831

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US 6458524 B1 20021001 US 2000-643717 20000823
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PRIORITY APPLN. INFO.: JP 1999-246122 A 19990831
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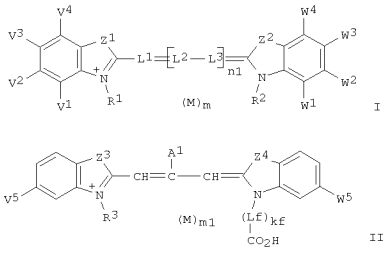
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 134:259141
GI

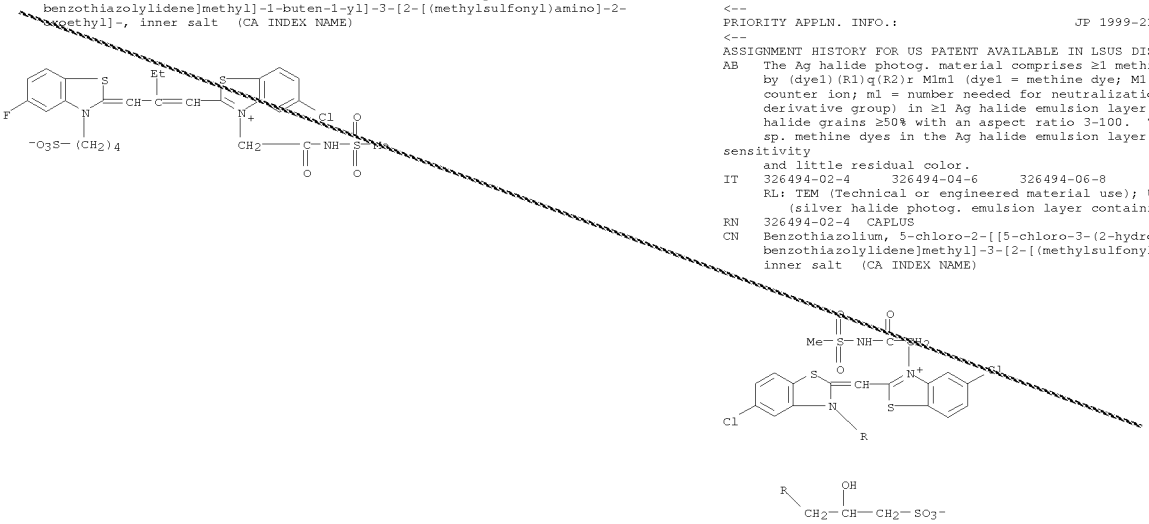


I

II

AB The material contains ≥1 I (Z1, Z2 = O, S, Se, Te, NR; R = alkyl, aryl, heterocycle; L1-3 = methine; n1 = 0-3; V1-4, W1-4 = H, substituent; πv or πw ≤0.70 (πv and πw are sum of π values of V1-4 and W1-4 resp.); M = counter ion; m = number required to neutralize intramol. charge; R1 = alkyl, aryl, heterocycle; R2 = LakaCONHSO2Ra, LbkbSO2NHCORb, LckcCONHCORc, LdkdSO2NHSO2Rd, LekeCOOH; Ra, Rb, Rc, Rd = alkyl, aryl, heterocycle, alkoxy, aryloxy, heterocyclyloxy, amino; La, Lb, Lc, Ld, Le = methylene; ka, kb, kc, kd, ke ≥1). The material comprises an emulsion layer containing ≥1 of I, II (Z3, Z4 = O, S; A1 =

L7 ANSWER 28 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
H, alkyl; either V5 or W5 = Cl, Br, I, trifluoromethyl, Et, benzoyl, 1-pyrrolyl; the other V5 or W5 = H, F, Me, methylthio, ethoxy, ethoxycarbonyl, 2-pyridyl, 4-pyridyl; M1 = counter ion; m1 = no. required to neutralize intramol. charge; R3 = sulfo-substituted alkyl; Lf = methylene; k = 1-3), and III (Z5, Z6 = O, S; A2 = H, alkyl; V6 = H, F, Me, methylthio, ethoxy, ethoxycarbonyl, 2-pyridyl, 4-pyridyl; W6 = Cl, Br, I, trifluoromethyl, Et, benzoyl, 1-pyrrolyl; M2 = counter ion; m2 = no. required to neutralize intramol. charge; R4 = sulfo-substituted alkyl; Rg = alkyl; Lg = methylene; k = 1-3) and also contg. Ag halide grains with 3-100 av. aspect ratio. It shows high sensitivity and reduced dye stain.
IT 331229-77-7
RL: DEV (Device component use); USES (Uses)
(photog. sensitizer giving high sensitivity and reduced residual stain)
RN 331229-77-7 CAPLUS
CN Benzothiazolium, 5-chloro-2-[2-[[5-fluoro-3-(4-sulfobutyl)-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



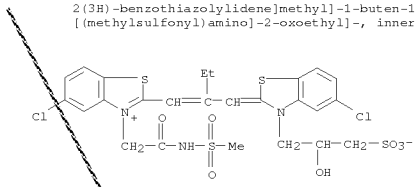
L7 ANSWER 29 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2001:117202 CAPLUS
DOCUMENT NUMBER: 134:185877
TITLE: Silver halide photographic material
INVENTOR(S): Hio, Takanori
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001042467	A	20010216	JP 1999-213977	19990728
US 6348307	B1	20020219	US 2000-625324	20000725

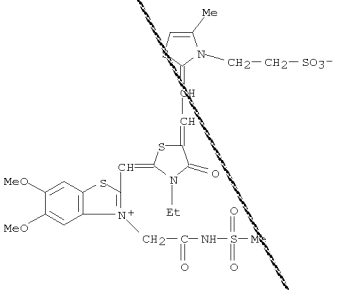
PRIORITY APPLN. INFO.: JP 1999-213977 A 19990728
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
AB The Ag halide photog. material comprises ≥1 methine dye represented by (dye1)(R1)q(R2)r M1m1 (dye1 = methine dye; M1 = charge-neutralizing counter ion; m1 = number needed for neutralization; q, r≥1; R1 = alkyl derivative group) in ≥1 Ag halide emulsion layer which contains Ag halide grains ≥50% with an aspect ratio 3-100. The use of above sp. methine dyes in the Ag halide emulsion layer provided high sensitivity and little residual color.
IT 326494-02-4 326494-04-6 326494-06-8
RL: TEM (Technical or engineered material use); USES (Uses)
(silver halide photog. emulsion layer containing)
RN 326494-02-4 CAPLUS
CN Benzothiazolium, 5-chloro-2-[[5-chloro-3-(2-hydroxy-3-sulfopropyl)-2(3H)-benzothiazolylidene]methyl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

L7 ANSWER 29 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

RN 326494-04-6 CAPLUS
CN Benzothiazolium, 5-chloro-2-[2-[[5-chloro-3-(2-hydroxy-3-sulfopropyl)-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



RN 326494-06-8 CAPLUS
CN Benzothiazolium, 2-[[3-ethyl-5-[2-[4-methyl-3-(2-sulfoethyl)-2(3H)-thiazolylidene]ethylidene]-4-oxo-2-thiazolidinylidene]methyl]-5,6-dimethoxy-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



L7 ANSWER 30 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2001:93900 CAPLUS
DOCUMENT NUMBER: 134:164473
TITLE: Acylsulfonamido-substituted polymethine fluorescent dyes and their use as fluorescent coloring materials and/or markers for biomolecules
INVENTOR(S): Deroover, Geert; Missfeldt, Michael; Simon, Lydia
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: Ger. Offen., 68 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19937024	A1	20010208	DE 1999-19937024	19990805
CA 2381088	A1	20010215	CA 2000-2381088	20000724
CA 2381088	C	20100112		
WO 2001011370	A1	20010215	WO 2000-EP7070	20000724

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1206703	A1	20020522	EP 2000-958289	20000724
JP 2003506567	T	20030218	JP 2001-515974	20000724
US 6995262	B1	20060207	US 2002-48775	20020315

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL

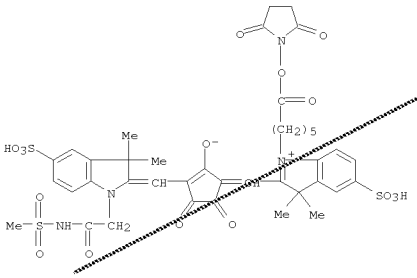
PRIORITY APPLN. INFO.: DE 1999-19937024 A 19990805
WO 2000-EP7070 W 20000724
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 134:164473
AB Polymethine dyes containing (1) at least one acylsulfonamido group of the formula (CH2)nYNHAR, where A and Y are electron-donating groups such as CO or SO2, R = optionally substituted alkyl or aryl, and n = 1-9 and (2) and at least one other functional group are effective as fluorescent coloring materials or markers for biomols. The polymethine dyes have improved light stability compared to prior-art indole or squaric acid-based materials when used with RNA, DNA, or proteins. Examples of preparation of 2 dyes were given.
IT 324745-27-9 324745-29-1 324745-31-5
324745-33-7 324745-35-9 324745-37-1

L7 ANSWER 30 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

325143-23-5 325143-24-6 325143-25-7
325143-26-8
RL: BUU (Biological use, unclassified); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
(acylsulfonamido-substituted polymethine fluorescent dye markers for biomols.)

RN 324745-27-9 CAPLUS
CN 3H-Indolium, 2-[[3-[[1,3-dihydro-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-5-sulfo-2H-indol-2-ylidene]methyl]-2-hydroxy-4,5-dioxo-2-cyclopenten-1-ylidene]methyl]-1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-3,3-dimethyl-5-sulfo-, inner salt, potassium salt (1:2) (CA INDEX NAME)

PAGE 1-A



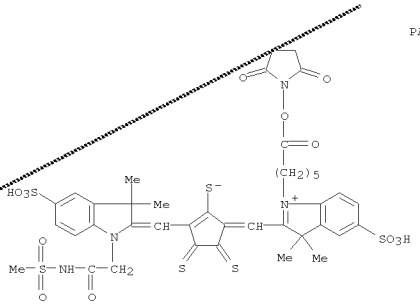
PAGE 2-A

●2 K

RN 324745-29-1 CAPLUS
CN 3H-Indolium, 2-[[3-[[1,3-dihydro-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-5-sulfo-2H-indol-2-ylidene]methyl]-2-mercapto-4,5-dithioxo-2-cyclopenten-1-ylidene]methyl]-1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-3,3-dimethyl-5-sulfo-, inner salt, potassium salt (1:2) (CA INDEX NAME)

L7 ANSWER 30 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

PAGE 1-A

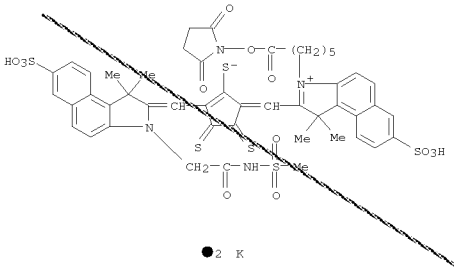


PAGE 2-A

●2 K

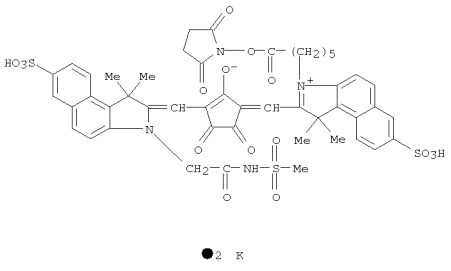
RN 324745-31-5 CAPLUS
CN 1H-Benz[e]indolium, 2-[[3-[[1,3-dihydro-1,1-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-7-sulfo-2H-benz[e]indol-2-ylidene]methyl]-2-mercapto-4,5-dithioxo-2-cyclopenten-1-ylidene]methyl]-3-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,1-dimethyl-7-sulfo-, inner salt, dipotassium salt (9CI) (CA INDEX NAME)

L7 ANSWER 30 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



●2 K

RN 324745-33-7 CAPLUS
CN 1H-Benz[e]indolium, 2-[[3-[[1,3-dihydro-1,1-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-7-sulfo-2H-benz[e]indol-2-ylidene]methyl]-2-hydroxy-4,5-dioxo-2-cyclopenten-1-ylidene]methyl]-3-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,1-dimethyl-7-sulfo-, inner salt, dipotassium salt (9CI) (CA INDEX NAME)

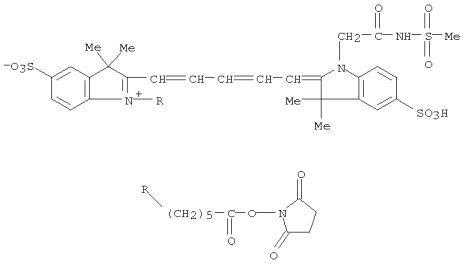


●2 K

RN 324745-35-9 CAPLUS
CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-5-sulfo-2H-indol-2-ylidene]-1,3-pentadien-1-yl]-1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-3,3-dimethyl-5-sulfo-, inner salt, potassium salt (1:1) (CA INDEX NAME)

L7 ANSWER 30 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

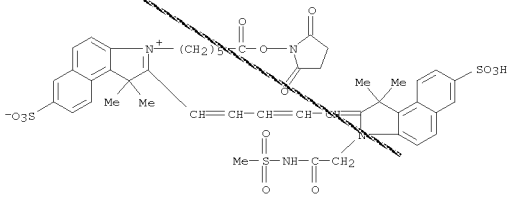
PAGE 1-A



PAGE 2-A

●K

RN 324745-37-1 CAPLUS
CN 1H-Benz[e]indolium, 2-[5-[1,3-dihydro-1,1-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-7-sulfo-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,1-dimethyl-7-sulfo-, inner salt, monopotassium salt (9CI) (CA INDEX NAME)

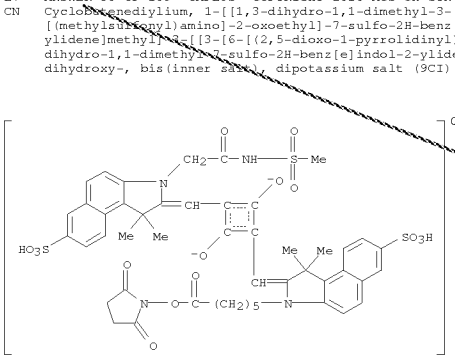


●K

RN 325143-23-5 CAPLUS

L7 ANSWER 30 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

CN Cyclobutenediylium, 1-[[1,3-dihydro-1,1-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-7-sulfo-2H-benz[e]indol-2-ylidene]methyl]-3-[[3-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-1,1-dimethyl-7-sulfo-2H-benz[e]indol-2-ylidene]methyl]-2,4-dihydroxy-, bis(inner salt), dipotassium salt (9CI) (CA INDEX NAME)

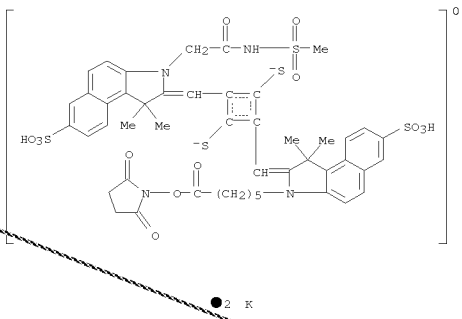


●2 K

RN 325143-24-6 CAPLUS

CN Cyclobutenediylium, 1-[[1,3-dihydro-1,1-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-7-sulfo-2H-benz[e]indol-2-ylidene]methyl]-3-[[3-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-1,1-dimethyl-7-sulfo-2H-benz[e]indol-2-ylidene]methyl]-2,4-dimercapto-, bis(inner salt), dipotassium salt (9CI) (CA INDEX NAME)

L7 ANSWER 30 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

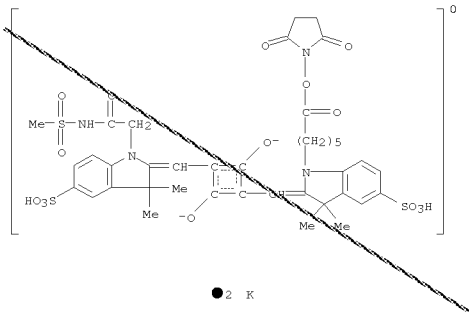


●2 K

RN 325143-25-7 CAPLUS

CN Cyclobutenediylium, 1-[[1,3-dihydro-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-5-sulfo-2H-indol-2-ylidene]methyl]-3-[[1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]methyl]-2,4-dihydroxy-, bis(inner salt), dipotassium salt (9CI) (CA INDEX NAME)

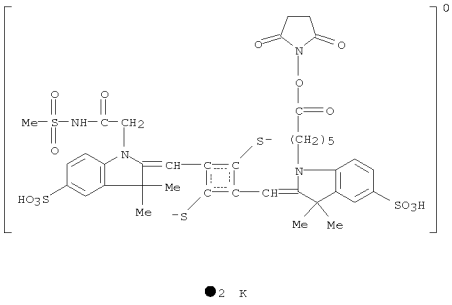
L7 ANSWER 30 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



●2 K

RN 325143-26-8 CAPLUS

CN Cyclobutenediylium, 1-[[1,3-dihydro-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-5-sulfo-2H-indol-2-ylidene]methyl]-3-[[1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]methyl]-2,4-dimercapto-, bis(inner salt), dipotassium salt (9CI) (CA INDEX NAME)



●2 K

IT 325143-27-9P 325143-28-0P

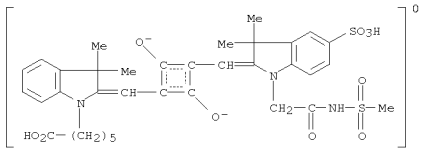
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

L7 ANSWER 30 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

(dye; prodn. of acylsulfonamido-substituted polymethine fluorescent dye markers for biomols.)

RN 325143-27-9 CAPLUS

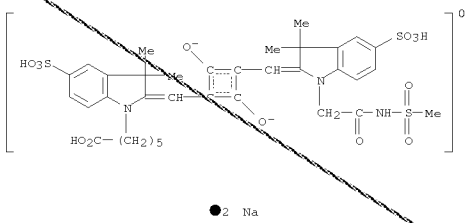
CN Cyclobutenediylium, 1-[[1-(5-carboxypentyl)-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]methyl]-3-[[1,3-dihydro-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-5-sulfo-2H-indol-2-ylidene]methyl]-2,4-dihydroxy-, bis(inner salt), monopotassium salt (9CI) (CA INDEX NAME)



●K

RN 325143-28-0 CAPLUS

CN Cyclobutenediylium, 1-[[1-(5-carboxypentyl)-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]methyl]-3-[[1,3-dihydro-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-5-sulfo-2H-indol-2-ylidene]methyl]-2,4-dihydroxy-, bis(inner salt), disodium salt (9CI) (CA INDEX NAME)



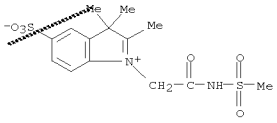
●2 Na

IT 324745-40-6P 324745-43-9P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; production of acylsulfonamido-substituted polymethine

L7 ANSWER 30 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
fluorescent dye markers for biomols.)
RN 324745-40-6 CAPLUS
CN 3H-Indolium, 2,3,3-trimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-5-sulfo-, inner salt (CA INDEX NAME)



RN 324745-43-9 CAPLUS
CN 1-Butanaminium, N,N,N-tributyl-, 2,3-dihydro-2-[(2-hydroxy-3,4-dioxo-1-cyclobuten-1-yl)methylene]-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-1H-indole-5-sulfonate (1:1) (CA INDEX NAME)

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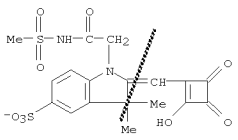
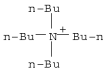
CRN 324745-42-8
CMF C18 H17 N2 O9 S2



CM 2

CRN 10549-76-5
CMF C16 H36 N



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

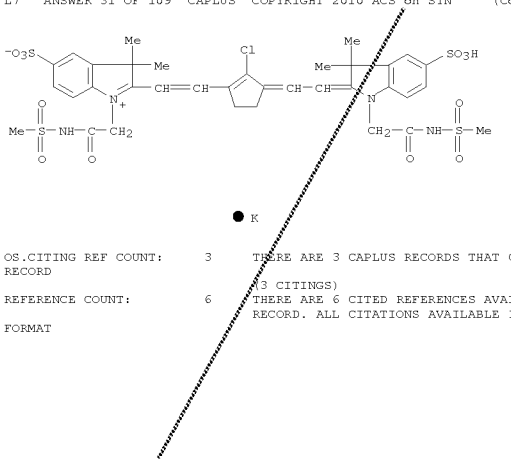
L7 ANSWER 30 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(2 CITINGS)

L7 ANSWER 31 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2001:10636 CAPLUS
DOCUMENT NUMBER: 134:78685
TITLE: Heat-sensitive imaging element with cover layer for providing a lithographic printing plate
INVENTOR(S): Vermeersch, Joan; Van Damme, Marc
PATENT ASSIGNEE(S): Agfa-Gevaert N.V., Belg.
SOURCE: Eur. Pat. Appl., 9 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1065049	A1	20010103	EP 2000-201854	20000524
EP 1065049	B1	20041110		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6503684	B1	20030107	US 2000-584490	20000601
JP 2001039047	A	20010213	JP 2000-192384	20000627
PRIORITY APPLN. INFO.:			EP 1999-202108 A	19990629
			US 1999-143664P P	19990714

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
AB The invention relates to heat-sensitive material for preparing lithog. plates. The invention provides a heat-sensitive material for making lithog. printing plates comprising on a lithog. support an image-forming layer comprising a hydrophilic binder a crosslinking agent for a hydrophilic binder and dispersed hydrophobic thermoplastic polymer particles, characterized in that the said image-forming layer is covered with a layer comprising at least one organic compound comprising cationic groups.
IT 251640-76-3
RL: DEV (Device component use); NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(heat-sensitive imaging element with cover layer for providing lithog. printing plate coated with IR-sensitive layer containing)
RN 251640-76-3 CAPLUS
CN 3H-Indolium, 2-[2-[2-chloro-3-[2-[1,3-dihydro-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-5-sulfo-2H-indol-2-ylidene]ethylidene]-1-cyclopenten-1-yl]ethenyl]-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-5-sulfo-, inner salt, potassium salt (1:1) (CA INDEX NAME)

L7 ANSWER 31 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD
(3 CITINGS)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 32 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2000:457018 CAPLUS
DOCUMENT NUMBER: 133:89793
TITLE: Preparation of 4-(4-hydroxyphenoxy)phenylacetyl amino acids and related compounds as novel thyroid receptor ligands
INVENTOR(S): Hangeland, Jon; Zhang, Minsheng; Caringal, Yolanda; Ryono, Denis; Li, Yi-lin; Malm, Johan; Liu, Ye; Garg, Neeraj; Litten, Chris; Garcia Collazo, Ana Maria; Koehler, Konrad
PATENT ASSIGNEE(S): Karo Bio AB, Swed.; et al.
SOURCE: PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

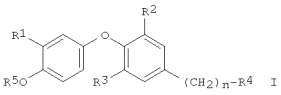
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000039077	A2	20000706	WO 1999-IB2084	19991223
WO 2000039077	A3	20000921		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2356319	A1	20000706	CA 1999-2356319	19991223
BR 9916851	A	20011016	BR 1999-16851	19991223
EP 1144370	A2	20011017	EP 1999-962486	19991223
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
TR 200101834	T2	20011221	TR 2001-1834	19991223
HU 2001004666	A2	20020328	HU 2001-4666	19991223
HU 2001004666	A3	20030528		
JP 2002533432	T	20021008	JP 2000-590990	19991223
JP 4405088	B2	20100127		
AU 758202	B2	20030320	AU 2000-18855	19991223
NZ 512422	A	20040227	NZ 1999-512422	19991223
CN 1186332	C	20050126	CN 1999-815057	19991223
NO 2001002931	A	20010821	NO 2001-2931	20010613

L7 ANSWER 32 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

ZA 2001004932	A	20030115	ZA 2001-4932	20010615
MX 2001006482	A	20010910	MX 2001-6482	20010622
IN 2001KN00754	A	20050311	IN 2001-KN754	20010720
US 6989402	B1	20060124	US 2001-868889	20010914
US 20050282872	A1	20051222	US 2005-189654	20050726
US 7288571	B2	20071030		

PRIORITY APPLN. INFO.: GB 1998-28442 A 19981224
WO 1999-IB2084 W 19991223
US 2001-868889 A3 20010914

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 133:89793
GI

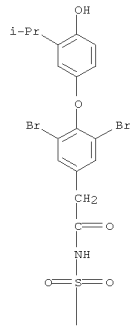


AB Title compds. I [R1 = halo, trifluoromethyl, alkyl, cycloalkyl; R2, R3 = H, halo, alkyl, at least one of R2 and R3 being other than H; n = 0-4; R4 is an (un)substituted heteroarom. moiety linked to (CH2)n via a nitrogen or carbon atom; an amine, including those in which the amine is derived from an alpha amino acid of either L- or D-stereochem., an acylsulfonamide, or a carboxylic acid amide, with the proviso that when n = 0, then R4 can only be a carboxylic acid amide or an acylsulfonamide; R5 is H or an acyl or other group capable of bioconversion to generate the free phenol structure] were prepared for use in the treatment of diseases associated with metabolism dysfunction or which are dependent on the expression of a T3 regulated gene (such as obesity, hypercholesterolemia, atherosclerosis, depression, osteoporosis, hypothyroidism, goiter, thyroid cancer, glaucoma, cardiac arrhythmia, and congestive heart failure). Thus, coupling of 3,5-dibromo-4-(4-hydroxy-3-isopropylphenoxy)phenylacetic acid with D-methionine Me ester hydrochloride followed by hydrolysis afforded N-[3,5-dibromo-4-(4-hydroxy-3-isopropylphenoxy)phenylacetyl]-D-methionine.

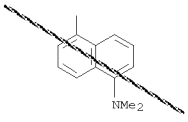
IT 280777-90-4P 280777-91-5P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of (hydroxyphenoxy)phenylacetyl amino acids and related compds. as novel thyroid receptor ligands)

RN 280777-90-4 CAPLUS
CN Benzeneacetamide, 3,5-dibromo-N-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-4-[4-hydroxy-3-(1-methylethyl)phenoxy]- (CA INDEX NAME)

PAGE 1-A

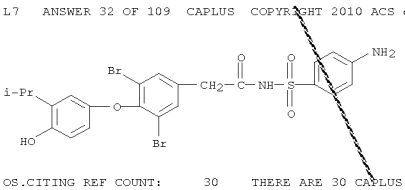


PAGE 2-A



RN 280777-91-5 CAPLUS
CN Benzeneacetamide, N-[(4-aminophenyl)sulfonyl]-3,5-dibromo-4-[4-hydroxy-3-(1-methylethyl)phenoxy]- (CA INDEX NAME)

L7 ANSWER 32 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 30 THERE ARE 30 CAPLUS RECORDS THAT CITE THIS RECORD (32 CITINGS)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 33 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2000:401373 CAPLUS
DOCUMENT NUMBER: 133:51111
TITLE: Silver halide color photographic material
INVENTOR(S): Morimoto, Kiyoshi; Hioki, Takanori; Yabuki, Yoshiharu
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 53 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000162729	A	20000616	JP 1999-124771	19990430

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PRIORITY APPLN. INFO.: JP 1998-285898 A 19980924
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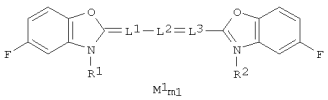
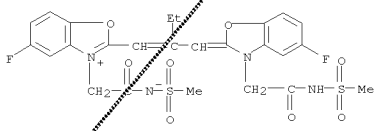
OTHER SOURCE(S): MARPAT 133:51111
GI



M^1_{m1} I

AB The title photog. material possesses a hydrophilic colloid layer containing ≥1 compound I (R1, R2 = alkyl, aralkyl, unsatd. hydrocarbon; L1-3 = methine; M1 = counter ion; m1 ≥ 0). and ≥1 dye A:CHQ (A = acidic nucleus; Q = aryl or aromatic heterocycle). The material shows low residual sensitizing dye stain and high sensitivity.
IT 275370-89-3
RL: DEV (Device component use); USES (Uses)
(photog. paper containing cyanine dye sensitizer and dye)
RN 275370-89-3 CAPLUS
CN Benzoxazolium, 5-fluoro-2-[2-[[5-fluoro-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2(3H)-benzoxazolylidene]methyl]-1-buten-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

L7 ANSWER 33 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



L7 ANSWER 34 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2000:198391 CAPLUS
DOCUMENT NUMBER: 132:207842
TITLE: Preparation of [[(benzisoxazolyloxy)alkyl]thio- or -oxy]benzenealkanoates as antidiabetic agents
INVENTOR(S): Berger, Gregory D.; Santini, Conrad; Patchett, Arthur;
Toupence, Richard B.; Fitch, Kenneth; Walsh, Thomas F.; Tolman, Richard L.; Sahoo, Soumya P.; Adams, Alan;
Von Lagen, Derek; Jones, Anthony B.; Graham, Donald W.; Leibowitz, Mark; Moller, David E.; Berger, David P.
PATENT ASSIGNEE(S): Merck and Co., Inc., USA
SOURCE: S. African, 202 pp.
CODEN: SFXXAB
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ZA 9700824	A	19981030	ZA 1997-824	19970131

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PRIORITY APPLN. INFO.: US 1996-11080P P 19960202
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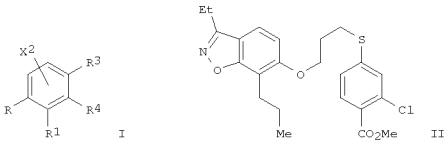
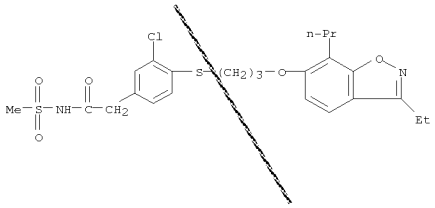
OTHER SOURCE(S): MARPAT 132:207842
GI



I II

AB Title compds. [I; R = R1Z1YQY1; Q = (saturated) hydrocarbylene; R1 = H, (un)substituted alk(en)yl, -alkynyl; R2 = R5CR6R7, R5CH:CH, R5CR6R7Z2; R3R4 = atoms to complete an (un)substituted ring containing 2 heteroatoms; R5 = CO2H, alkoxycarbonyl, CONH2, tetrazolyl, etc.; R6,R7 = H or alkyl; Y = O, SO0-2, CH2, CO, NH, etc.; Y1 = O or C (sic); X2 = H, halo, alkyl, alkoxy, etc.; Z1 = (un)substituted 1,3- or 1,4-phenylene; Z2 = CR6R7, O, SO0-2, (alkyl)imino] were prepared Thus, 2,3-dihydroxy-3-propylpropiophenone was etherified by Br(CH2)3Br and the product thioetherified by MeO2CZSCONMe2 (Z1 = 3-chloro-1,4-phenylene) to give, in 4 addnl. steps, title compound II. Data for biol. activity of I were given.
IT 194980-41-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of [[(benzisoxazolyloxy)alkyl]thio- or -oxy]benzenealkanoates as antidiabetic agents)
RN 194980-41-1 CAPLUS
CN Benzeneacetamide, 3-chloro-4-[[3-[(3-ethyl-7-propyl-1,2-benzisoxazol-6-yl)oxy]propyl]thio]-N-(methylsulfonyl)- (CA INDEX NAME)

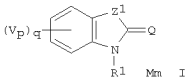
L7 ANSWER 34 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



L7 ANSWER 35 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2000:137432 CAPLUS
DOCUMENT NUMBER: 132:187581
TITLE: New sensitizer and silver halide photographic material containing the same
INVENTOR(S): Hioki, Takanori; Morimoto, Kiyoshi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 39 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

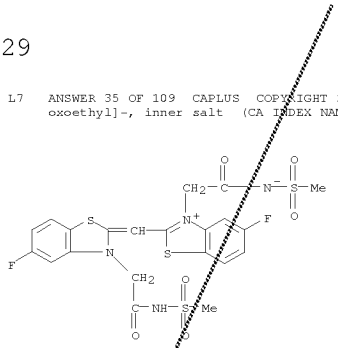
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000063689	A	20000229	JP 1998-240635	19980826
US 6365335	B1	20020402	US 1999-373584	19990813

PRIORITY APPLN. INFO.: JP 1998-240635 A 19980826
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 132:187581
GI

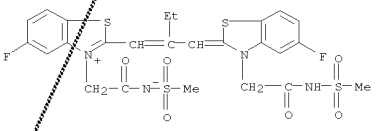


AB The photog. material contains the new sensitizer represented by general formula I (Z1 = O, S, Se, Te, C, N; Q = groups for forming methine dye; Mm = counter ion; Vp = F, etc.; q = 1-4; R1 = (La)k1CONHSO2R11, (Lb)k2SO2NHCOR12, (Lc)k3CONHCOR13, (Ld)k4SO2NHSO2R14; R11-14 = alkyl, aryl, heterocycle, alkoxy, aryloxy, heterocyclyloxy, amino; La, Lb, Lc, Ld = methylene; k1, k2, k3, k4 = 1-18). The photog. material contains Ag halide grains with an average aspect ratio of 3-1,000. The photog. material shows excellent sensitivity and reduced color residue.
IT 259657-52-8
RL: DEV (Device component use); USES (Uses)
(new methine sensitizer for Ag halide photog. material with excellent sensitivity and reduced color residue)
RN 259657-52-8 CAPLUS
CN Benzothiazolium, 5-fluoro-2-[[5-fluoro-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2(3H)-benzothiazolylidene]methyl]-3-[2-[(methylsulfonyl)amino]-2-

L7 ANSWER 35 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
oxoethyl]-, inner salt (CA INDEX NAME)

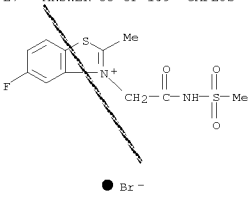


IT 259657-58-4P
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(new methine sensitizer for Ag halide photog. material with excellent sensitivity and reduced color residue)
RN 259657-58-4 CAPLUS
CN Benzothiazolium, 5-fluoro-2-[2-[[5-fluoro-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



IT 259657-66-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of new methine sensitizer for Ag halide photog. material with excellent sensitivity and reduced color residue)
RN 259657-66-4 CAPLUS
CN Benzothiazolium, 5-fluoro-2-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)

L7 ANSWER 35 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

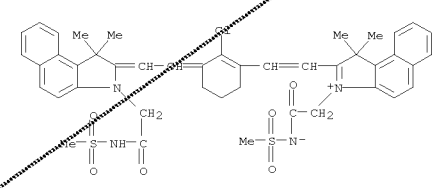


OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L7 ANSWER 36 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2000:137162 CAPLUS
DOCUMENT NUMBER: 132:187674
TITLE: Heat-mode lithographic original plate with improved storage stability
INVENTOR(S): Van Rompuy, Ludo; Meisters, August; Leenders, Luc
PATENT ASSIGNEE(S): AGFA Gevaert N.V., Belg.
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000062339	A	20000229	JP 1999-200226	19990714

PRIORITY APPLN. INFO.: EP 1998-202382 A 19980716
AB A neg.-working non-ablative image-forming material, suited for use in production of a lithog. printing master, comprises a metallic support coated with a layer or a stack of layers which contains a near IR ray-absorbing compound and other reactive compds. in an amount of ≥50 and ≤20 weight%, resp., to all the compds. present in the layer or stack and the near IR ray-absorbing compound is an organic compound or C-based compound The image-forming material is imagewise exposed to near IR ray followed by wiping the layer with water, if necessary, to give a lithog. printing master. The material shows good storage stability is useful in production of a lithog. printing master by computer-to-plate, computer-to-press or on-press coating process.
IT 192220-92-1
RL: DEV (Device component use); USES (Uses)
(heat-mode lithog. plate containing IR absorbing compound)
RN 192220-92-1 CAPLUS
CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[2-(1,3-dihydro-1,1-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2H-benz[e]indol-2-ylidene]ethylidene]-1-cyclohexen-1-yl]ethenyl]-1,1-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



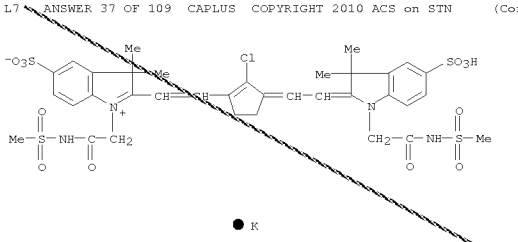
L7 ANSWER 36 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

L7 ANSWER 37 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1999:763708 CAPLUS
DOCUMENT NUMBER: 132:17163
TITLE: Heat-sensitive imaging element for lithographic plate preparation
INVENTOR(S): Van Damme, Marc; Van Aert, Huub; Vermeersch, Joan
PATENT ASSIGNEE(S): Agfa-Gevaert N.V., Belg.
SOURCE: Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 960729	A1	19991201	EP 1999-200846	19990318
EP 960729	B1	20030528		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6096471	A	20000801	US 1999-280656	19990329
JP 2000052669	A	20000222	JP 1999-137266	19990518
PRIORITY APPLN. INFO.:			EP 1998-201727 A	19980525
			US 1998-92557P P	19980713

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
AB A heat-sensitive imaging element for lithog. plate preparation comprises a support and an image-forming layer comprising a hardened hydrophilic binder, a heat-switchable polymer, and a compound capable of converting light into heat, characterized in that the heat-switchable polymer is a polymer containing aryldiazosulfonate units.
IT 251640-76-3
RL: TEM (Technical or engineered material use); USES (Uses)
(heat-sensitive imaging elements for lithog. plate preparation containing aryldiazosulfonate group-containing polymers and)
RN 251640-76-3 CAPLUS
CN 3H-Indolium, 2-[2-[2-chloro-3-[2-[1,3-dihydro-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-5-sulfo-2H-indol-2-ylidene]ethylidene]-1-cyclopenten-1-yl]ethenyl]-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-5-sulfo-, inner salt, potassium salt (1:1) (CA INDEX NAME)

L7 ANSWER 37 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



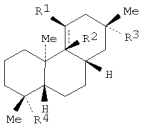
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 38 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1999:487259 CAPLUS
DOCUMENT NUMBER: 131:130145
TITLE: Diterpene derivatives and anti-inflammatory analgesic agents comprising the same
INVENTOR(S): Suh, Young Ger; Choi, Young Hoon; Lee, Hye Kyung; Kim, Young Ho; Park, Hyoung Sup
PATENT ASSIGNEE(S): Sae Han Pharm. Co., Ltd., S. Korea
SOURCE: PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9937600	A1	19990729	WO 1999-KR38	19990125
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9921876	A	19990809	AU 1999-21876	19990125
EP 1056710	A1	20001206	EP 1999-901968	19990125
EP 1056710	B1	20031210		
R: CH, DE, ES, FR, GB, IT, LI				
JP 2003502271	T	20030121	JP 2000-528526	19990125
ES 2211030	T3	20040701	ES 1999-901968	19990125
CN 1171846	C	20041020	CN 1999-802429	19990125
US 6593363	B1	20030715	US 2000-600774	20000915
PRIORITY APPLN. INFO.:			KR 1998-2441 A	19980126
			WO 1999-KR38 W	19990125

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 131:130145
GI

L7 ANSWER 38 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



I

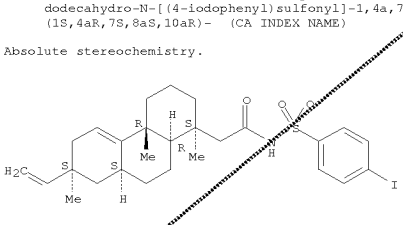
AB Title compds. I [R1, R2 = H, OH; or R1R2 = part of a ring; R3 = hydroxyethyl, methoxyethyl, acetoxyethyl, methoxymethoxyethyl, methoxyethoxymethoxyethyl, methoxyiminoethyl, isoxazolinyl; R4 = CH2OH, CH2COOH, carboxyvinyl, carboxyethyl, etc.] are prepared as antiinflammatories. Thus, (-)-pimara-9(11),15-diene-4-carboxylic acid was reduced with LiAlH4 to give 4-(hydroxymethyl)-(-)-pimara-9(11),15-diene. In an in vitro study, this had an IC50 of >2000 μM against PGE2 synthesis. Antiinflammatory compns. containing I are described.

IT 233750-12-4P
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of antiinflammatory diterpene derivs.)

RN 233750-12-4 CAPLUS

CN 1-Phenanthreneacetamide, 7-ethenyl-1,2,3,4,4a,6,7,8,8a,9,10,10a-dodecahydro-N-[(4-iodophenyl)sulfonyl]-1,4a,7-trimethyl-, (1S,4aR,7S,8aS,10aR)- (CA INDEX NAME)

Absolute stereochemistry.



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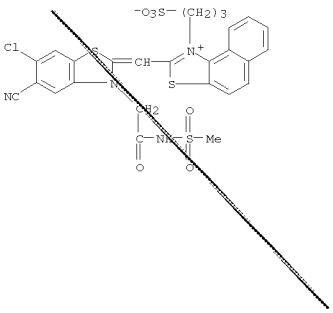
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 39 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
sulfopropyl)-, inner salt (CA INDEX NAME)



L7 ANSWER 39 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1998:627423 CAPLUS
DOCUMENT NUMBER: 129:323832
ORIGINAL REFERENCE NO.: 129:65901a,65904a
TITLE: Photographic film containing monomethine cyanine and providing low-fog image by rapid development
INVENTOR(S): Ooya, Toyotaka
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10254084	A	19980925	JP 1997-58150	19970312

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PRIORITY APPLN. INFO.: JP 1997-58150 19970312
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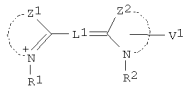
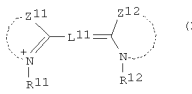
OTHER SOURCE(S): MARPAT 129:323832
GI



I



II

AB The film contains ≥1 cyanine dye I (Z1 = naphthothiazole ring; Z2 = 5-membered heterocycle; V1 = CN; R1, R2 = alkyl; L1 = methine; X1 = counter ion; n1 = pos. number for electronic neutralization) and optional II (Z11, Z12 = 5-membered heteroazacycle). The film provides clear images without color stains.

IT 214635-47-9
RL: MOA (Modifier or additive use); USES (Uses)
(sensitizer; photog. film containing monomethine cyanine and providing low-fog image even by rapid development)

RN 214635-47-9 CAPLUS

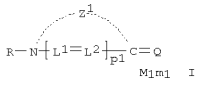
CN Naphtho[1,2-d]thiazolium, 2-[[6-chloro-5-cyano-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2(3H)-benzothiazolylidene]methyl]-1-(3-

L7 ANSWER 40 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1998:176447 CAPLUS
DOCUMENT NUMBER: 128:302054
ORIGINAL REFERENCE NO.: 128:59717a,59720a
TITLE: Silver halide photographic material
INVENTOR(S): Suga, Yoichi; Taniguchi, Makoto
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 70 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10073898	A	19980317	JP 1996-246911	19960830

<--
JP 3579195 B2 20041020
US 6010842 A 20000104 US 1997-921359 19970829
<--
PRIORITY APPLN. INFO.: JP 1996-246911 A 19960830
<--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
GI



I

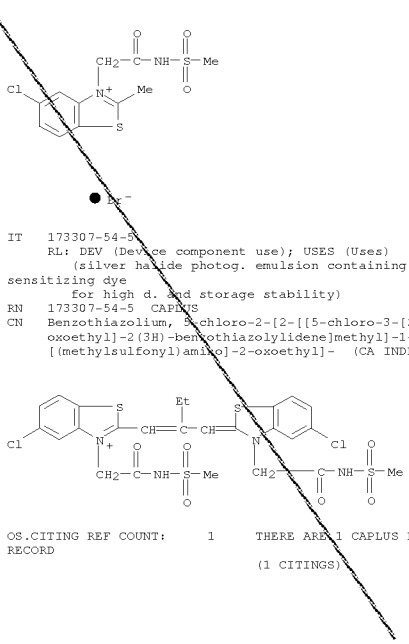
AB Title material comprises a support having ≥1 Ag halide emulsion layer containing an urea derivative R1R2NCONR3OH (R1-3 = H, alkyl, aryl) and a sensitizing dye I [R = QarCONSO2Ra, QbsSO2NCORb, QctCONCORc, QduSO2NSO2Rd (Ra-Rd = alkyl, heterocyclyl, alkoxy, aryloxy, amino; Qa-Qd = methylene; r, s, t, u = 1-10); L1, L2 = methine; p1 = 0 or 1; Z1 = atoms required to form a 5 or 6-membered N-containing heterocyclyl; M1 = counter ion; m1 = 0-10; Q = heterocyclic group- or aromatic group-substituted methine or polymethine]. The material shows high sensitivity and storage stability.

IT 148350-04-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(in preparation of sensitizing dye for high-d. and storage-stable silver halide photog. emulsion containing urea derivative)

RN 148350-04-3 CAPLUS

CN Benzothiazolium, 5-chloro-2-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)

L7 ANSWER 40 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



IT 173307-54-5
RL: DEV (Device component use); USES (Uses)
(silver halide photog. emulsion containing urea derivative and sensitizing dye
for high d. and storage stability)
RN 173307-54-5 CAPLUS
CN Benzothiazolium, 5-chloro-2-[2-[[5-chloro-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]- (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L7 ANSWER 41 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1998:154902 CAPLUS
DOCUMENT NUMBER: 128:263877
ORIGINAL REFERENCE NO.: 128:52105a,52108a
TITLE: Silver halide photographic material using polymethine sensitizing dye
INVENTOR(S): Kagawa, Nobuaki; Kita, Noriyasu; Nakamura, Masaki; Ishii, Fumio
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 62 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

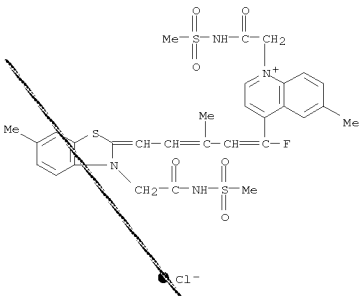
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10062889	A	19980306	JP 1996-217245	19960819
JP 3430386	B2	20030728		

PRIORITY APPLN. INFO.: JP 1996-217245 19960819

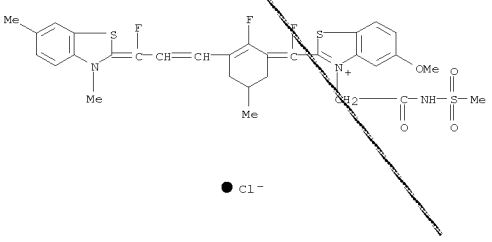
AB The title material contains a Ag halide emulsion layer spectrally sensitized with a polymethine dye in which the methine chains are replaced by ≥1 F and the aliphatic groups substituted on the N atom in the azole rings are linked by ≥3 methine groups having ≥1 water-soluble group. The material shows good storage stability, low residual color stain, and improved photog. properties.

IT 205172-92-5 205172-99-2
RL: TEM (Technical or engineered material use); USES (Uses)
(silver halide photog. emulsion sensitized with polymethine dye)
RN 205172-92-5 CAPLUS
CN Quinolinium, 4-[1-fluoro-3-methyl-5-[6-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2(3H)-benzothiazolylidene]-1,3-pentadien-1-yl]-6-methyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, chloride (1:1) (CA INDEX NAME)

L7 ANSWER 41 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 205172-99-2 CAPLUS
CN Benzothiazolium, 2-[3-[3-(3,6-dimethyl-2(3H)-benzothiazolylidene)-3-fluoro-1-propen-1-yl]-2-fluoro-5-methyl-2-cyclohexen-1-ylidene]fluoromethyl]-5-methoxy-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, chloride (1:1) (CA INDEX NAME)

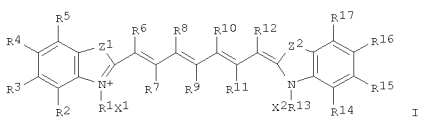


L7 ANSWER 42 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1998:147054 CAPLUS
DOCUMENT NUMBER: 128:161042
ORIGINAL REFERENCE NO.: 128:31577a,31580a
TITLE: Photothermographic recording material comprising sensitizing dye
INVENTOR(S): Deroover, Geert; Hoogmartens, Ivan; Strijckers, Hans
PATENT ASSIGNEE(S): Agfa-Gevaert N.V., Belg.
SOURCE: Eur. Pat. Appl., 36 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 821266	A1	19980128	EP 1997-201906	19970621
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
US 5876915	A	19990302	US 1997-889481	19970708
JP 10073900	A	19980317	JP 1997-211407	19970722
JP 3794793	B2	20060712		

PRIORITY APPLN. INFO.: EP 1996-202108 A 19960724

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 128:161042
GI



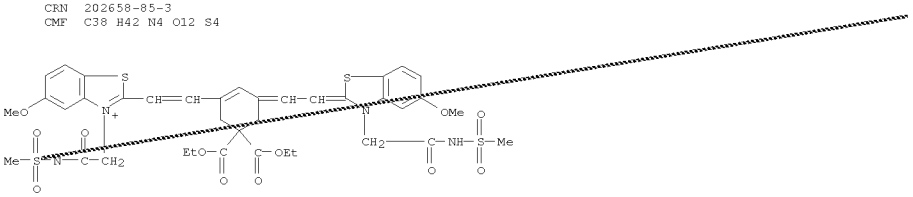
I

AB A photothermog. recording material comprises a support and a photoaddressable thermally developable element comprising a substantially light-insensitive organic silver salt, a reducing agent therefor in thermal working relationship therewith, a photosensitive silver halide spectrally sensitized with a dye and in catalytic association with the substantially light-insensitive organic silver salt, and a binder. The dye has the general formula I where, Z1, Z2 = S, O, or Se; R1, R13 = alkylene; X1, X2 = (CO)R18, (SO2)R19, or (SO)R20 where R18, R19, and R20 = alkoxy, aryloxy, amino, or substituted amino; R2-5, R14-17 = H, Cl, Br, F, I, keto, sulfo, carboxy, ester, sulfonamido, amido, dialkylamino, nitro, cyano, alkyl, alkenyl, heteroarom., aryl, alkoxy, or aryloxy which may be substituted; R2 and R3, R3 and R4, R4 and R5, R14 and R15, R15 and R16, or R16 and R17 together may constitute the atoms necessary to complete a benzene ring

L7 ANSWER 42 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
which may be substituted; R6-12 = H, Cl, Br, F, I, alkyl, alkoxy, aryloxy,
thioalkyl, or disubstituted amino, where the substituents may constitute the atoms necessary to complete a 5- or 6-membered heterocyclic ring; R6 and R8, R8 and R10, R10 and R12, R7 and R9, or R9 and R11 together may constitute the atoms necessary to complete a 5- or 6-membered carbocyclic or heterocyclic ring which may be substituted; R1 and R6 or R13 and R12 may constitute the atoms necessary to complete a 5- or 6-membered heterocyclic ring which may be substituted.
IT 202658-86-4
RL: TEM (Technical or engineered material use); USES (Uses)
(sensitizer for photothermog. recording materials)
RN 202658-86-4 CAPLUS
CN Benzothiazolium, 2-[2-[5,5-bis(ethoxycarbonyl)-3-[[5-methoxy-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2(3H)-benzothiazolylidene]ethylidene]-1-cyclohexen-1-yl]ethenyl]-5-methoxy-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt, compd. with N,N-diethylethanamine (1:1) (9CI) (CA
INDEX NAME)

CM 1

CRN 202658-85-3
CMF C38 H42 N4 O12 S4



CM 2

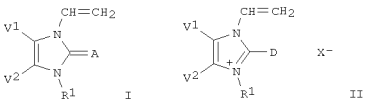
CRN 121-44-8
CMF C6 H15 N

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L7 ANSWER 43 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1997:732398 CAPLUS
DOCUMENT NUMBER: 128:68436
ORIGINAL REFERENCE NO.: 128:13255a,13258a
TITLE: Imidazole derivative and silver halide photographic material spectrally sensitized with the compound
INVENTOR(S): Kita, Noriyasu; Kagawa, Nobuaki
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 65 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09291220 <--	A	19971111	JP 1996-106936	19960426
JP 3791045	B2	20060628		
PRIORITY APPLN. INFO.: <--			JP 1996-106936	19960426

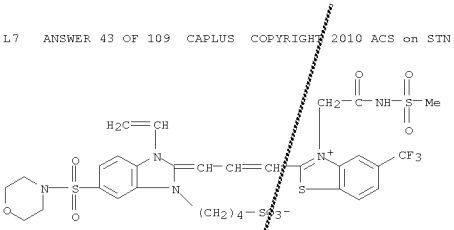
GI



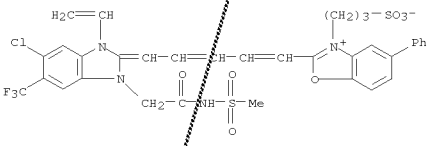
I II

AB The imidazole derivative is shown as I (R1 = aliphatic; A = group to form merocyanine dye via conjugated chain; V1, V2 = H, substituent; V1 and V2 may form condensed ring) or II (R1, D, V1, V2 = same as above; X = counter
ion; l1 = number to neutralize intermol. charge). A Ag halide photog. material is spectrally sensitized with I and/or II. Fogging is minimized.
IT 200189-09-9 200189-22-6 200189-43-1
200189-60-2
RL: TEM (Technical or engineered material use); USES (Uses)
(imidazole derivative and Ag halide photog. material spectrally sensitized
with the compound)
RN 200189-09-9 CAPLUS
CN Benzothiazolium, 2-[3-[1-ethenyl-1,3-dihydro-5-(4-morpholinylsulfonyl)-3-(4-sulfobutyl)-2H-benzimidazol-2-ylidene]-1-propen-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-5-(trifluoromethyl)-, inner salt (CA
INDEX NAME)

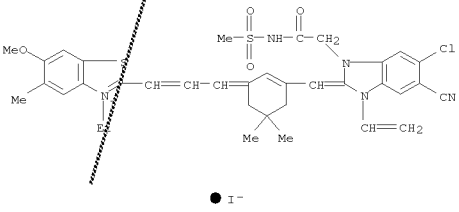
L7 ANSWER 43 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 200189-22-6 CAPLUS
CN Benzoxazolium, 2-[5-[5-chloro-3-ethenyl-1,3-dihydro-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-6-(trifluoromethyl)-2H-benzimidazol-2-ylidene]-1,3-pentadien-1-yl]-5-phenyl-3-(3-sulfopropyl)-, inner salt (CA
INDEX NAME)

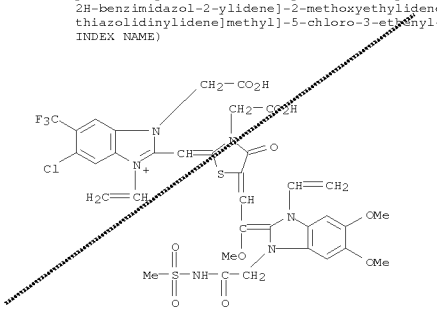


RN 200189-43-1 CAPLUS
CN Benzothiazolium, 2-[3-[3-[[5-chloro-6-cyano-1-ethenyl-1,3-dihydro-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2H-benzimidazol-2-ylidene]methyl]-5,5-dimethyl-2-cyclohexen-1-ylidene]-1-propen-1-yl]-3-ethyl-6-methoxy-5-methyl-, iodide (1:1) (CA INDEX NAME)



● I-

L7 ANSWER 43 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RN 200189-60-2 CAPLUS
CN 1H-Benzimidazolium, 1-(carboxymethyl)-2-[[3-(carboxymethyl)-5-[2-[1-ethenyl-1,3-dihydro-5,6-dimethoxy-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2H-benzimidazol-2-ylidene]-2-methoxyethylidene]-4-oxo-2-thiazolidinylidene]methyl]-5-chloro-3-ethenyl-6-(trifluoromethyl)- (CA INDEX NAME)

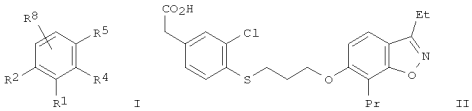


L7 ANSWER 44 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1997:533628 CAPLUS
DOCUMENT NUMBER: 127:220650
ORIGINAL REFERENCE NO.: 127:43005a,43008a
TITLE: Preparation of [(heterocyclyloxy)alkoxy- and -alkylthio]phenylalkanoates and analogs as peroxisome proliferator-activated receptor antagonists
INVENTOR(S): Adams, Alan D.; Berger, Joel P.; Berger, Gregory D.; Fitch, Kenneth J.; Graham, Donald W.; Jones, Anthony B.; Von Langen, Derek; et al.
PATENT ASSIGNEE(S): Merck and Co., Inc., USA; Adams, Alan D.; Berger, Joel P.; Berger, Gregory D.; Fitch, Kenneth J.; Graham, Donald W.
SOURCE: PCT Int. Appl., 219 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

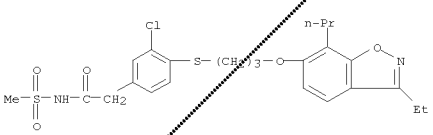
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9728137	A1	19970807	WO 1997-US1749	19970131
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, US, UZ, VN				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2244836	A1	19970807	CA 1997-2244836	19970131
CA 2244836	C	20070501		
AU 9718563	A	19970822	AU 1997-18563	19970131
AU 708055	B2	19990729		
EP 882029	A1	19981209	EP 1997-904210	19970131
EP 882029	B1	20030402		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
US 6090836	A	20000718	US 1997-791211	19970131
JP 2002503203	T	20020129	JP 1997-527899	19970131
AT 236137	T	20030415	AT 1997-904210	19970131
ES 2194179	T3	20031116	ES 1997-904210	19970131

PRIORITY APPLN. INFO.:	US 1996-11080P	P	19960202
	GB 1996-4234	A	19960228
	US 1996-34434P	P	19961223

L7 ANSWER 44 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
WO 1997-US1749 W 19970131
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 127:220650
GI



AB Title compds. [I; R1 = H, (un)substituted alk(en)yl, etc.; R2 = RZZ1Z2Z3Z4; R = CO2R3, CONH2, tetrazolyl, etc.; R3 = H, NHR1, alkyl, etc.; R4R5 = atoms to completes an (un)substituted 5 to 6-membered (un)substituted heterocyclic ring; R8 = H, halo, alkyl, alkoxy, etc.; Z = CR6R7Z5 or CH:CH; R6,R7 = H or alkyl; Z1 = (un)substituted 1,3- or 1,4-phenylene; Z2 = O, CO, SO0-2, CH2, etc.; Z3 = alk(en)ylene; Z4 = O or C (sic); Z5 = bond, CR6R7, O, NR6, SO0-2] were prepared Thus, 2,4-dihydroxy-3-propylpropiophenone was etherified by Br(CH2)3Br and the product thioetherified by 3,4-Cl(Me2NOCS)C6H3CH2CO2Me to give, in 4 addnl. steps, title compound II. Data for biol. activity of I were given.
IT 194980-41-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of [(heterocyclyloxy)alkoxy- and -alkylthio]phenylalkanoates and analogs as peroxisome proliferator-activated receptor antagonists)
RN 194980-41-1 CAPLUS
CN Benzeneacetamide, 3-chloro-4-[[3-[(3-ethyl-7-propyl-1,2-benzisoxazol-6-yl)oxy]propyl]thio]-N-(methylsulfonyl)- (CA INDEX NAME)



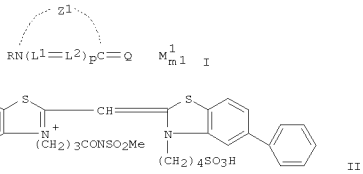
OS.CITING REF COUNT: 25 THERE ARE 25 CAPLUS RECORDS THAT CITE THIS RECORD (29 CITINGS)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 44 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

L7 ANSWER 45 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1997:526288 CAPLUS
DOCUMENT NUMBER: 127:255246
ORIGINAL REFERENCE NO.: 127:49745a,49748a
TITLE: Silver halide photographic material with high sensitivity
INVENTOR(S): Matsumoto, Atsushi; Hioki, Takanori; Nakamura, Tetsuo
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 64 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09203993	A	19970805	JP 1996-12755	19960129
US 6057089	A	20000502	US 1997-784919	19970116
PRIORITY APPLN. INFO.:			JP 1996-12755 A	19960129

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
GI

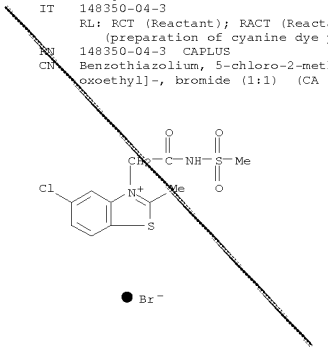


I

II

AB The title material comprises a support coated with ≥1 Ag halide emulsion layer containing reduction-sensitized Ag halide grains and contains ≥1 sensitizing dye I [R = QarCONSO2Ra, QbsSO2NCORb, QctCONCORc, QduSO2NSO2Rd (Ra-d = alkyl, aryl, heterocycle, alkoxy, aryloxy, amino; Qa-d = methylene group; r, s, t, u = 1-10); L1, L2 = methine group; p = 0, 1; Z1 = atoms required to form 5 or 6-membered N-containing heterocycles; M1 = counter ion; m1 = 0-10; Q = methine or polymethine group substituted for heterocyclic or aromatic groups]. The material shows high sensitivity, low fog, and improved storage stability. Thus, a photog. film was prepared by

L7 ANSWER 45 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
using a Ag(Br,I) emulsion redn.-sensitized with thiourea dioxide and contg. II.
IT 148350-04-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of cyanine dye photog. sensitizer)
RN 148350-04-3 CAPLUS
CN Benzothiazolium, 5-chloro-2-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)

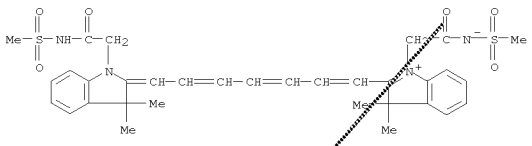


L7 ANSWER 46 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1997:496774 CAPLUS
DOCUMENT NUMBER: 127:115221
ORIGINAL REFERENCE NO.: 127:22101a,22104a
TITLE: A novel class of non-sensitizing infra-red dyes for use in photosensitive elements
INVENTOR(S): Kiekens, Eric
PATENT ASSIGNEE(S): Agfa-Gevaert Naamloze Vennootschap, Belg.
SOURCE: Eur. Pat. Appl., 24 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

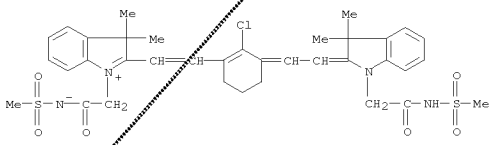
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 779540	A1	19970618	EP 1996-203355	19961128
R: BE, DE, FR, GB				
US 5741632	A	19980421	US 1996-762442	19961209
JP 09179236	A	19970711	JP 1996-351785	19961212
US 5936086	A	19990810	US 1998-20690	19980210
PRIORITY APPLN. INFO.:			EP 1995-203492 A	19951214
			US 1996-762442 A3	19961209

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 127:115221
AB A novel class of non-sensitizing infra-red dyes derived from heptamethine dyes with indolenine nuclei is disclosed. They are useful as filter, acutance, or antihalation dyes for photog. elements based on silver halide or for photothermog. elements.
IT 192220-83-0 192220-84-1 192220-86-3
192220-87-4 192220-89-6 192220-91-0
192220-92-1 192220-94-3 192220-95-4
192220-96-5 192220-97-6 192220-98-7
192220-99-8
RL: TEM (Technical or engineered material use); USES (Uses)
(non-sensitizing IR dye for photog. and photothermog. materials)
RN 192220-83-0 CAPLUS
CN 3H-Indolium, 2-[7-[1,3-dihydro-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2H-indol-2-ylidene]-1,3,5-heptatrien-1-yl]-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

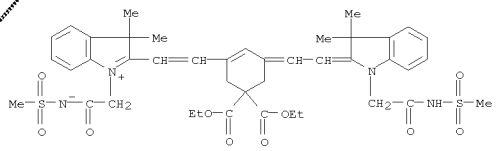
L7 ANSWER 46 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 192220-84-1 CAPLUS
CN 3H-Indolium, 2-[2-[2-chloro-3-[2-[1,3-dihydro-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2H-indol-2-ylidene]ethylidene]-1-cyclohexen-1-yl]ethenyl]-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

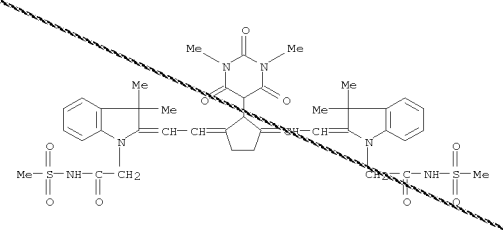


RN 192220-86-3 CAPLUS
CN 3H-Indolium, 2-[2-[3-[2-[1,3-dihydro-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2H-indol-2-ylidene]ethylidene]-5,5-bis(ethoxycarbonyl)-1-cyclohexen-1-yl]ethenyl]-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

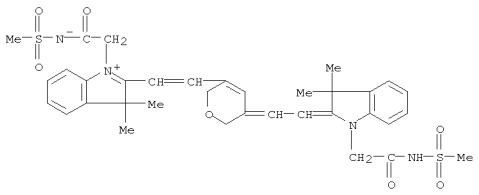


RN 192220-87-4 CAPLUS
CN 1H-Indole-1-acetamide, 2,2'-[[2-(hexahydro-1,3-dimethyl-2,4,6-trioxo-5-pyrimidinyl)-1,3-cyclopentanediylidene]di-2,1-ethanediylidene]bis[2,3-dihydro-3,3-dimethyl-N-(methylsulfonyl)- (9CI) (CA INDEX NAME)

L7 ANSWER 46 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

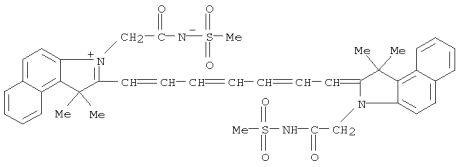


RN 192220-89-6 CAPLUS
CN 3H-Indolium, 2-[2-[5-[2-[1,3-dihydro-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2H-indol-2-ylidene]ethylidene]-5,6-dihydro-2H-pyran-3-yl]ethenyl]-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

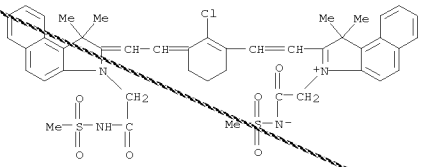


RN 192220-91-0 CAPLUS
CN 1H-Benz[e]indolium, 2-[7-[1,3-dihydro-1,1-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2H-benz[e]indol-2-ylidene]-1,3,5-heptatrien-1-yl]-1,1-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

L7 ANSWER 46 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

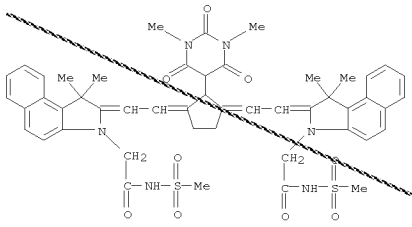


RN 192220-92-1 CAPLUS
CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[2-[1,3-dihydro-1,1-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2H-benz[e]indol-2-ylidene]ethylidene]-1-cyclohexen-1-yl]ethenyl]-1,1-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

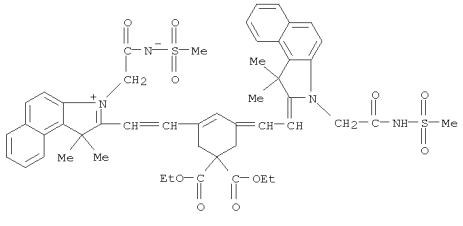


RN 192220-94-3 CAPLUS
CN 3H-Benz[e]indole-3-acetamide, 2,2'-[[2-(hexahydro-1,3-dimethyl-2,4,6-trioxo-5-pyrimidinyl)-1,3-cyclopentanediylidene]di-2,1-ethanediylidene]bis[1,2-dihydro-1,1-dimethyl-N-(methylsulfonyl)- (9CI) (CA INDEX NAME)

L7 ANSWER 46 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

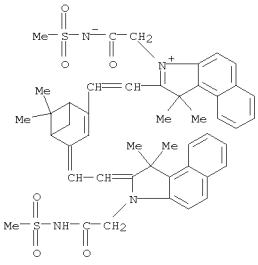


RN 192220-95-4 CAPLUS
CN 1H-Benz[e]indolium, 2-[2-[3-[2-[1,3-dihydro-1,1-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2H-benz[e]indol-2-ylidene]ethylidene]-5,5-bis(ethoxycarbonyl)-1-cyclohexen-1-yl]ethenyl]-1,1-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

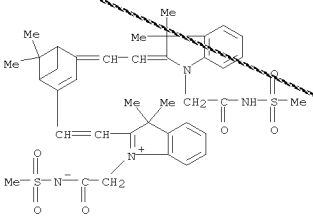


RN 192220-96-5 CAPLUS
CN 1H-Benz[e]indolium, 2-[2-[4-[2-[1,3-dihydro-1,1-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2H-benz[e]indol-2-ylidene]ethylidene]-6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl]ethenyl]-1,1-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

L7 ANSWER 46 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

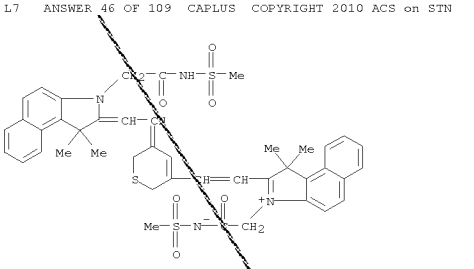


RN 192220-97-6 CAPLUS
CN 3H-Indolium, 2-[2-[4-[2-[1,3-dihydro-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2H-indol-2-ylidene]ethylidene]-6,6-dimethylbicyclo[3.1.1]hept-2-en-2-yl]ethenyl]-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

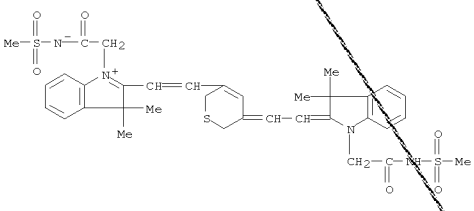


RN 192220-98-7 CAPLUS
CN 1H-Benz[e]indolium, 2-[2-[5-[2-[1,3-dihydro-1,1-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2H-benz[e]indol-2-ylidene]ethylidene]-5,6-dihydro-2H-thiopyran-3-yl]ethenyl]-1,1-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

L7 ANSWER 46 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 192220-99-8 CAPLUS
CN 3H-Indolium, 2-[2-[5-[2-[1,3-dihydro-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2H-indol-2-ylidene]ethylidene]-5,6-dihydro-2H-thiopyran-3-yl]ethenyl]-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

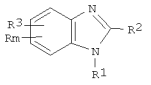
L7 ANSWER 47 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1997:476314 CAPLUS
DOCUMENT NUMBER: 127:135799
ORIGINAL REFERENCE NO.: 127:26201a
TITLE: Preparation of benzimidazole derivatives as drugs
INVENTOR(S): Yamasaki, Noritsugu; Imoto, Takafumi; Murai, Yoshiyuki; Hiramura, Takahiro; Oku, Teruo; Sawada, Kouzou
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 380 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

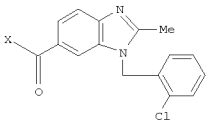
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9724334	A1	19970710	WO 1996-JP3858	19961227
W: AU, BR, CA, CN, HU, IL, JP, KR, MX, NZ, RU, SG, TR, US, AM, AZ, BY, KG, KZ, MD, TJ, TM				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2241186	A1	19970628	CA 1996-2241186	19961227
CA 2241186	C	20060214		
AU 9712095	A	19970728	AU 1997-12095	19961227
AU 722514	B2	20000803		
EP 882718	A1	19981209	EP 1996-943331	19961227
EP 882718	B1	20050831		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
CN 1211238	A	19990317	CN 1996-180137	19961227
HU 9900625	A2	19990628	HU 1999-625	19961227
HU 9900625	A3	20030428		
BR 9612434	A	19991228	BR 1996-12434	19961227
JP 2000159749	A	20000613	JP 2000-8395	19961227
JP 3063162	B2	20000712	JP 1997-524201	19961227
NZ 324834	A	20011130	NZ 1996-324834	19961227
IL 124969	A	20020912	IL 1996-124969	19961227
AT 303365	T	20050915	AT 1996-943331	19961227
ES 2244979	T3	20051216	ES 1996-943331	19961227
ZA 9610918	A	19970708	ZA 1996-10918	19961230
TW 548272	B	20030821	TW 1997-86100149	19970108
ZA 9708998	A	19980420	ZA 1997-8998	19971008
US 6166219	A	20001226	US 1998-91997	19981102
US 6352985	B1	20020305	US 2000-492955	20000128

PRIORITY APPLN. INFO.: JP 1995-343425 A 19951228
JP 1996-287676 A 19961008
JP 1997-524201 A 19961227
WO 1996-JP3858 W 19961227
US 1998-91997 A1 19981102

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 127:135799
GI



I

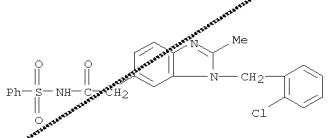


II

AB The title compds. [I; R1 = H, arylsulfonyl, (un)substituted lower alkyl, etc.; R2 = H, lower cycloalkyl, alkylthio, or alkoxy, OH, SH, NH2, aryl, etc.; R3 = CO2H, NH2, CONH, etc.; R = substituting group or H; m = 1-3] are prepared I, possessing hypoglycemic or PDE5 inhibitory effects, are useful as remedies for impaired glucose tolerance, diabetes, complications of diabetes, insulin resistant syndrome, hyperlipidemia, atherosclerosis, cardiovascular diseases, hyperglycemia, hypertension, angina pectoris, pulmonary hypertension, congestive heart failure, glomerular diseases, tubular interstitial diseases, renal failure, angiostenosis, peripheral vascular disease, apoplexy, chronic reversible obstructive diseases, allergic rhinitis, urticaria, glaucoma, diseases characterized by abnormality in intestinal motility, sexual impotence, nephritis, cancerous cachexia, and post-PCTA reconstriction. Thus, benzimidazole deriv. (II; X = OH) was reacted with C6H5SO2NH2 in the presence of N,N'-carbonyldiimidazole and diazabicycloundecene in DMF at 100° for 70 h to give the title compd. II (X = PhSO2NH), which showed 72% blood sugar lowering activity when tested with mouse.

IT 193010-87-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzimidazole derivs. as drugs)

RN 193010-87-6 CAPLUS
CN 1H-Benzimidazole-6-acetamide, N-[(2-chlorophenyl)methyl]-2-methyl-N-(phenylsulfonyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 44 THERE ARE 44 CAPLUS RECORDS THAT CITE THIS RECORD (67 CITINGS)
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 48 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1997:317788 CAPLUS
DOCUMENT NUMBER: 126:293368
ORIGINAL REFERENCE NO.: 126:56816h,56817a
TITLE: Benzoxazepine compounds, their production and use as lipid lowering agents
INVENTOR(S): Yukimasa, Hidefumi; Sugiyama, Yasuo; Tozawa, Ryuichi
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 112 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

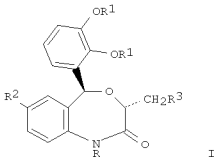
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9710224	A1	19970320	WO 1996-JP2596	19960912
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HU, IL, IS, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, US, UZ, VN				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2231052	A1	19970320	CA 1996-2231052	19960912
CA 2231052	C	20071113		
AU 9669442	A	19970401	AU 1996-69442	19960912
JP 09136880	A	19970527	JP 1996-242378	19960912
JP 3479796	B2	20031215		
EP 862562	A1	19980909	EP 1996-930365	19960912
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
CN 1196052	A	19981014	CN 1996-196892	19960912
CN 1072649	C	20011010		
EP 1097928	A1	20010509	EP 2000-126672	19960912
EP 1097928	B1	20080716		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AT 202774	T	20010715	AT 1996-930365	19960912
ES 2158344	T3	20010901	ES 1996-930365	19960912
PT 862562	E	20011130	PT 1996-930365	19960912
AT 401315	T	20080815	AT 2000-126672	19960912
ZA 9702134	A	19990604	ZA 1997-2134	19970312

L7 ANSWER 48 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

US 6110909	A	20000829	US 1998-43265	19980312
US 6613761	B1	20030902	US 2000-587947	20000606
JP 2001097963	A	20010410	JP 2000-323310	20001018
JP 4021612	B2	20071212		
GR 3036707	T3	20011231	GR 2001-401564	20010926
US 20040072819	A1	20040415	US 2003-606152	20030624
US 20070117787	A1	20070524	US 2006-638066	20061212
JP 2007332154	A	20071227	JP 2007-210503	20070810
US 20080153801	A1	20080626	US 2007-986280	20071119
PRIORITY APPLN. INFO.:			JP 1995-235457	A 19950913
			EP 1996-930365	A3 19960912
			JP 1996-242378	A3 19960912
			WO 1996-JP2596	W 19960912
			ZA 1997-2134	A 19970312
			US 1998-43265	A3 19980312
			US 2000-587947	A1 20000606
			JP 2000-323310	A3 20001018
			US 2003-606152	B1 20030624
			US 2006-638066	B1 20061212

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 126:293368
GI

L7 ANSWER 48 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



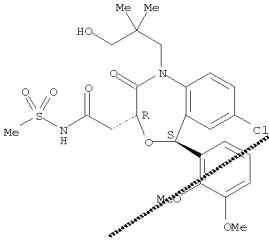
I

AB New benzoxazepines I [R = alkyl, hydroxyalkyl; R1 = alkyl; R2 = halogen; R3 = (un)substituted CONH2, heterocyclic group having a deprotonatable hydrogen atom]were prepared for use as cholesterol and triglyceride lowering agent. Thus, I [R = CH2CMe3, R1 = Me, R2 = Cl, R3 = CO2H] was amidated, dehydrated to the nitrile, and cyclized with Me3SiN3 to give I [R = CH2CMe3, R1 = Me, R2 = Cl, R3 = 5-tetrazolyl] which had a squalene synthetase inhibiting IC50 of 11X10-9 M.

IT 189059-84-5P 189059-85-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of arylbenzoxazepinones as hypolipemic agents)

RN 189059-84-5 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-1-(3-hydroxy-2,2-dimethylpropyl)-N-(methylsulfonyl)-2-oxo-, (3R,5S)- (CA INDEX NAME)

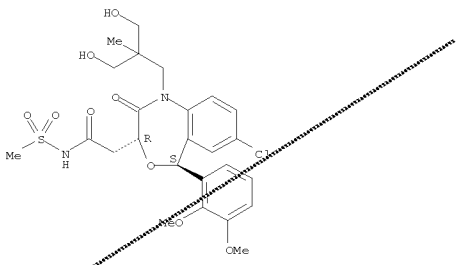
Absolute stereochemistry.



RN 189059-85-6 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-1-[3-hydroxy-2-(hydroxymethyl)-2-methylpropyl]-N-(methylsulfonyl)-2-oxo-, (3R,5S)- (CA INDEX NAME)

L7 ANSWER 48 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

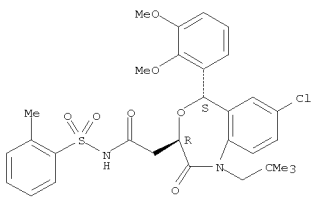
Absolute stereochemistry.



IT 189059-79-8P 189059-80-1P 189059-81-2P
189059-82-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of arylbenzoxazepinones as hypolipemic agents)

RN 189059-79-8 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 7-chloro-5-(2,3-dimethoxyphenyl)-1-(2,2-dimethylpropyl)-1,2,3,5-tetrahydro-N-[(2-methylphenyl)sulfonyl]-2-oxo-, (3R,5S)- (CA INDEX NAME)

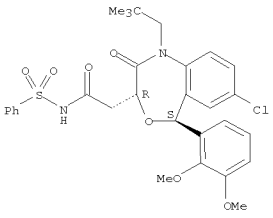
Absolute stereochemistry.



RN 189059-80-1 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 7-chloro-5-(2,3-dimethoxyphenyl)-1-(2,2-dimethylpropyl)-1,2,3,5-tetrahydro-2-oxo-N-(phenylsulfonyl)-, (3R,5S)- (CA INDEX NAME)

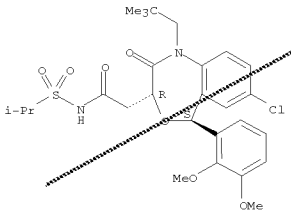
L7 ANSWER 48 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

Absolute stereochemistry.



RN 189059-81-2 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 7-chloro-5-(2,3-dimethoxyphenyl)-1-(2,2-dimethylpropyl)-1,2,3,5-tetrahydro-N-[(1-methylethyl)sulfonyl]-2-oxo-, (3R,5S)- (CA INDEX NAME)

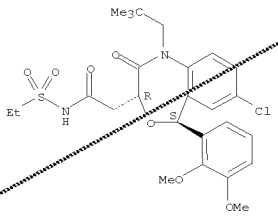
Absolute stereochemistry.



RN 189059-82-3 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 7-chloro-5-(2,3-dimethoxyphenyl)-1-(2,2-dimethylpropyl)-N-(ethylsulfonyl)-1,2,3,5-tetrahydro-2-oxo-, (3R,5S)- (CA INDEX NAME)

Absolute stereochemistry.

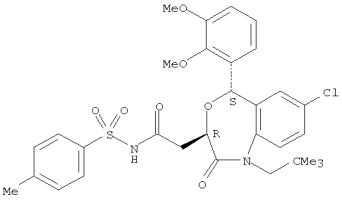
L7 ANSWER 48 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



IT 189059-76-5P 189059-78-7P 189060-07-9P
189060-45-5P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of arylbenzoxazepinones as hypolipemic agents)

RN 189059-76-5 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 7-chloro-5-(2,3-dimethoxyphenyl)-1-(2,2-dimethylpropyl)-1,2,3,5-tetrahydro-N-[(4-methylphenyl)sulfonyl]-2-oxo-, (3R,5S)- (CA INDEX NAME)

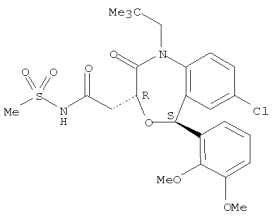
Absolute stereochemistry.



RN 189059-78-7 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 7-chloro-5-(2,3-dimethoxyphenyl)-1-(2,2-dimethylpropyl)-1,2,3,5-tetrahydro-N-(methylsulfonyl)-2-oxo-, (3R,5S)- (CA INDEX NAME)

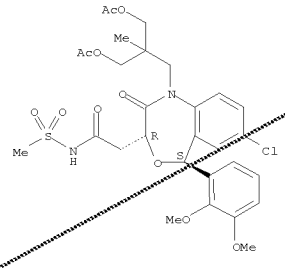
Absolute stereochemistry.

L7 ANSWER 48 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 189060-07-9 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 1-[3-(acetyloxy)-2-[(acetyloxy)methyl]-2-methylpropyl]-7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-N-(methylsulfonyl)-2-oxo-, (3R,5S)- (CA INDEX NAME)

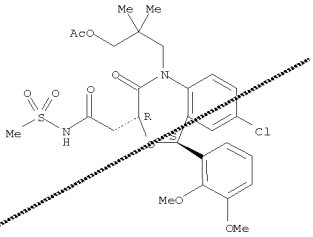
Absolute stereochemistry.



RN 189060-45-5 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 1-[3-(acetyloxy)-2,2-dimethylpropyl]-7-chloro-5-(2,3-dimethoxyphenyl)-1,2,3,5-tetrahydro-N-(methylsulfonyl)-2-oxo-, (3R,5S)- (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 48 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

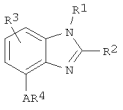


OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (60 CITINGS)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 49 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1997:315042 CAPLUS
DOCUMENT NUMBER: 126:293352
ORIGINAL REFERENCE NO.: 126:56809a,56812a
TITLE: Preparation of benzimidazoles for the prevention and/or the treatment of bone diseases
INVENTOR(S): Oku, Teruo; Kawai, Yoshio; Yatabe, Takumi; Sato, Shigeki; Yamazaki, Hitoshi; Kayakiri, Natsuko; Yoshihara, Kousei
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 146 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

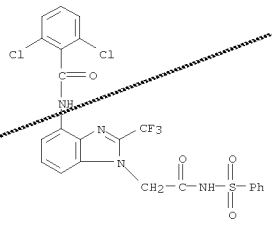
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9710219	A1	19970320	WO 1996-JP2530	19960905
<--				
W: JP, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 863881	A1	19980916	EP 1996-929540	19960905
<--				
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
JP 11513364	T	19991116	JP 1996-511824	19960905
<--				
PRIORITY APPLN. INFO.:			GB 1995-18552 A	19950911
<--				
			WO 1996-JP2530 W	19960905
<--				

OTHER SOURCE(S): MARPAT 126:293352
GI



I

AB The title compds. [I; R1 = acyl, (un)substituted lower alkenyl, lower alkyl; R2 = H, lower alkyl, lower alkoxy, etc.; R1R2 = lower alkylene, lower alkenylene (may include O, S, NH, N-alkyl); R3 = H, halo; R4 = (un)substituted heterocyclyl, aryl; A = CONR9, N(R10)CO (wherein R9, R10 = H, (un)substituted lower alkyl)], and their pharmaceutically acceptable salts, inhibitors of bone resorption and bone metab., were prepd. Thus, hydrogenation of 1,2-dimethyl-4-nitro-1H-benzimidazole over 10% Pd/C in MeOH followed by reaction of the resulting 4-amino-1,2-dimethyl-1H-benzimidazole with 2,6-dichlorobenzoyl chloride in the presence of Et3N in ethylene chloride afforded I [R1, R2 = Me; R3 = H; R4 = 2,6-Cl2C6H3; A = NHCO]. Compds. I are effective at 0.1-1000 mg/body/day.
IT 189043-28-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzimidazoles for the prevention and/or the treatment of bone diseases)
RN 189043-28-5 CAPLUS
CN 1H-Benzimidazole-1-acetamide, 4-[(2,6-dichlorobenzoyl)amino]-N-(phenylsulfonyl)-2-(trifluoromethyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 50 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1997:90192 CAPLUS
DOCUMENT NUMBER: 126:124704
ORIGINAL REFERENCE NO.: 126:23975a,23978a
TITLE: Silver halide photographic material containing hydrazine derivative and method of developing
INVENTOR(S): Tanabe, Junichi; Ito, Hirohide
PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 51 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08272030	A	19961018	JP 1995-78835	19950404
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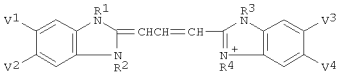
JP 3416830	B2	20030616		
PRIORITY APPLN. INFO.:			JP 1995-78835	19950404
<--				

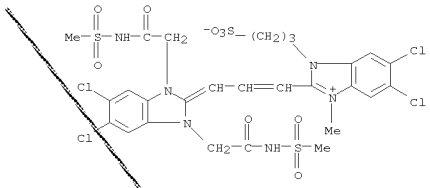
GI



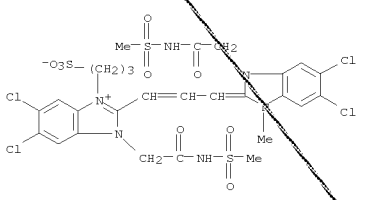
I

AB In a Ag halide photog. material having ≥1 layer containing a hydrazine derivative on an emulsion layer side of a support, (1) the Ag halide photog. material is spectrally sensitized by a compound I (V1,2 = H, electron-attracting group; V2,4 = electron-attracting group; R1-4 = C≤10 alkyl, alkenyl; X1 = counter ion neutralizing charge; n = 0, 1; n = 0 for intramol. salt) and (2) ≥1 layer on the emulsion layer side of the support contains solid dye microparticle dispersion. The process comprises a development process using a developer which contains a compound R1CH(OH)C(:O)(X)kR2 (R1,2 = alkyl, amino, alkoxy, alkylthio; R1 and r2 may form a ring; k = 0,1; when k = 1, X represents CO or CS) but is free of dihydroxybenzene compds. The Ag halide photog. material is suitable for a film for printing, and provided super-high contrast image.
IT 161911-20-2 161911-21-3
RL: TEM (Technical or engineered material use); USES (Uses)
(silver halide photog. material containing hydrazine derivative and method of developing)
RN 161911-20-2 CAPLUS
CN 1H-Benzimidazolium, 5,6-dichloro-2-[3-[5,6-dichloro-1,3-dihydro-1,3-bis[2-[(methylsulfonyl)amino]-2-oxoethyl]-2H-benzimidazol-2-ylidene]-1-propen-1-yl]-1-methyl-3-(3-sulfopropyl)-, inner salt (CA INDEX NAME)

L7 ANSWER 50 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 161911-21-3 CAPLUS
CN 1H-Benzimidazolium, 5,6-dichloro-2-[3-[5,6-dichloro-1,3-dihydro-1-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2H-benzimidazol-2-ylidene]-1-propen-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-1-(3-sulfopropyl)-, inner salt (CA INDEX NAME)



L7 ANSWER 51 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1996:666522 CAPLUS
DOCUMENT NUMBER: 125:288709
ORIGINAL REFERENCE NO.: 125:53763a,53766a
TITLE: Silver halide photographic material spectrally sensitized by trinuclear cyanine having improved red sensitivity and low dye stain
INVENTOR(S): Kagawa, Nobuaki; Kita, Noryasu
PATENT ASSIGNEE(S): Konishiroku Photo Ind., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 30 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08201954	A	19960809	JP 1995-11332	19950127

<--
PRIORITY APPLN. INFO.: JP 1995-11332 19950127
<--

GI For diagram(s), see printed CA Issue.

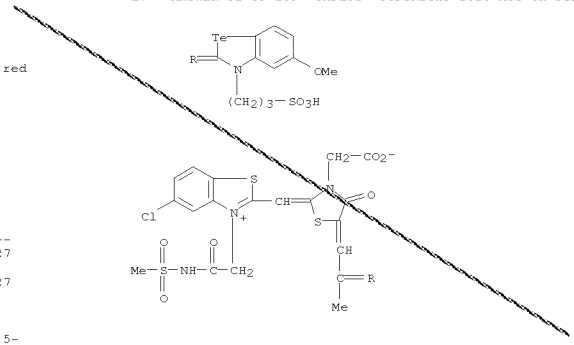
AB The claimed photog. material is characterized by (1) that ≥1 of the emulsion layer is spectrally sensitized by a cyanine dye I (Z1, Z2 = 5- or 6-membered heterocyclic ring; Z3 = NR, O, S, Se, Te; R, R2 = aliphatic, aryl, heterocyclic group; R1, R3 = C 1-10 aliphatic; at least one of R and R1-3 has a water-solubilizing group; L1 = substituted methine; L2, L3 = methyne; M1 and n = counter ion for stoichiometric balance; l, k, m = 0, 1). A sensitizing dye II (Y11-13 = NR10, O, S, Se, Te; R10-13, L11-13 have the same meaning as R, R1-3, L1-3 in I; V1-4 = H, alkyl, aryl, alkoxy; ≥1 R10-13 has a water-solubilizing group; M11 and n = counter ion for stoichiometric balance; m = 0, 1). The spectral sensitizer provides high sensitivity at red spectral region, and also provides the material with good shelf life and low residual dye stain at the processing.

IT 182946-33-4
RL: DEV (Device component use); USES (Uses)
(Ag halide photog. material spectrally sensitized by trinuclear cyanine having improved red sensitivity and low dye stain)

RN 182946-33-4 CAPLUS

CN Benzothiazolium, 2-[[3-(carboxymethyl)-5-[2-[5-methoxy-3-(3-sulfopropyl)-1,3-benzotellurazol-2(3H)-ylidene]propylidene]-4-oxo-2-thiazolidinylidene]methyl]-5-chloro-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

L7 ANSWER 51 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



L7 ANSWER 52 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1996:530842 CAPLUS
DOCUMENT NUMBER: 125:181129
ORIGINAL REFERENCE NO.: 125:33681a,33684a
TITLE: Silver halide photographic materials with high sensitivity and low fog
INVENTOR(S): Ootani, Hiroshi
PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08146548	A	19960607	JP 1994-286502	19941121

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PRIORITY APPLN. INFO.: JP 1994-286502 19941121
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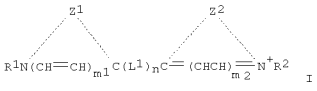
GI



I

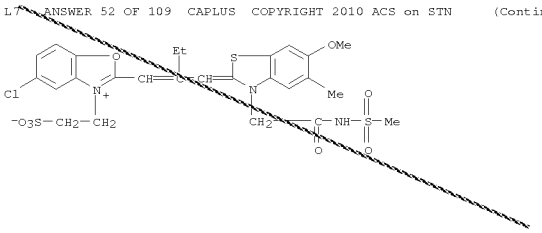
AB The title materials have a photosensitive Ag halide emulsion layer, in which Ag halide particles (e.g., planar particles with aspect ratio ≥3 and ≥70% projection area) are chemical sensitized by a Te compound or a Te compound and a Se compound and spectrally sensitized by the dye I (Z1-2 = nonmetal atomic group for 5- or 6-membered N-containing heterocycle; L1 = methine; R1 = JSO2NH2, JCONHCOR3, JCONHSO2R3, JSO2NHCOR3, JSO2NHSO2R3, JOCOR3, JSCOR3, JOCOOR3, JSCOOR3; J = alkylene; R3 = alkyl; R2 = R1, unsubstituted alkyl, alkyl substituted with sulfoalkyl, carboxyalkyl, hydroxyalkyl; m1-2 = 0, 1; n = odd integer).

IT 172415-58-6
RL: NUU (Other use, unclassified); USES (Uses)
(sensitizing dye; silver halide photog. materials with high sensitivity and low fog)

RN 172415-58-6 CAPLUS

CN Benzoxazolium, 5-chloro-2-[2-[[6-methoxy-5-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-(2-sulfoethyl)-, inner salt (CA INDEX NAME)

L7 ANSWER 52 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

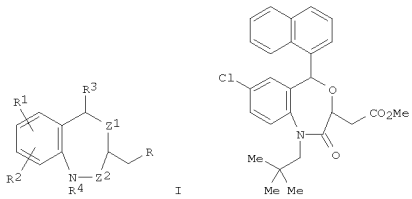


L7 ANSWER 53 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1996:524078 CAPLUS
DOCUMENT NUMBER: 125:168038
ORIGINAL REFERENCE NO.: 125:31497a,31500a
TITLE: Preparation of naphthylbenzoxazepines or -benzothiazepines as squalene synthetase inhibitors
INVENTOR(S): Hamanaka, Ernest S.; Hawkins, Joel M.; Hayward, Cheryl M.
PATENT ASSIGNEE(S): Pfizer Inc., USA
SOURCE: PCT Int. Appl., 118 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9620184	A1	19960704	WO 1995-IB424	19950602
W: CA, FI, JP, MX, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2207772	A1	19960704	CA 1995-2207772	19950602
JP 10500702	T	19980120	JP 1995-520314	19950602
IN 1995DE02260	A	20050311	IN 1995-DE2260	19951207
LV 11325	B	19970220	LV 1995-379	19951221
BR 9505995	A	19971223	BR 1995-5995	19951221
NO 9505288	A	19960624	NO 1995-5288	19951222
AU 9540677	A	19960704	AU 1995-40677	19951222
CN 1133287	A	19961016	CN 1995-120143	19951222
HU 74672	A2	19970128	HU 1995-3783	19951222
US 5770594	A	19980623	US 1997-860155	19970617
FI 9702696	A	19970623	FI 1997-2696	19970623
PRIORITY APPLN. INFO.:			US 1994-362713 A	19941223
			WO 1995-IB424 W	19950602

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 125:168038
GI

L7 ANSWER 53 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

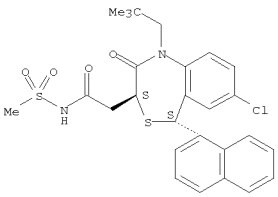


I II

AB Title compds. [I; R = CO2H, alkoxycarbonyl, CONH2, etc.;R1,R2 = H, halo, alkyl,alkoxy, etc.; R3 = (un)substituted naphthyl; R4 = alkyl, cycloalkylmethyl, etc.; Z1 = O, SO0-2; Z2 = CO or CH2] were prepared as squalene synthetase inhibitors (no data). Thus, 4-ClC6H4NHCH2CMe3 (preparation given) was hydroxyalkylated by 1-naphthaldehyde and the product N-acylated by (E)-ClCOCH:CHCO2Me to give, after cyclization, title compds. II.
IT 180346-09-2P 180346-10-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of naphthylbenzoxazepines or -benzothiazepines as squalene synthetase inhibitors)
RN 180346-09-2 CAPLUS
CN 4,1-Benzothiazepine-3-acetamide, 7-chloro-1-(2,2-dimethylpropyl)-1,2,3,5-tetrahydro-N-(methylsulfonyl)-5-(1-naphthalenyl)-2-oxo-, trans- (9CI) (CA INDEX NAME)

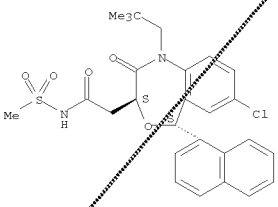
Relative stereochemistry.

L7 ANSWER 53 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 180346-10-5 CAPLUS
CN 4,1-Benzoxazepine-3-acetamide, 7-chloro-1-(2,2-dimethylpropyl)-1,2,3,5-tetrahydro-N-(methylsulfonyl)-5-(1-naphthalenyl)-2-oxo-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



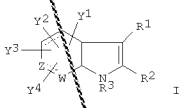
OS.CITING REF COUNT: 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 54 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1996:353185 CAPLUS
DOCUMENT NUMBER: 125:33473
ORIGINAL REFERENCE NO.: 125:6533a,6536a
TITLE: Preparation of heterocyclic compounds useful as allosteric effectors at muscarinic receptors
INVENTOR(S): Birdsall, Nigel; Lazareno, Sebastian; Naruto, Syunji; Koyama, Kazuo; Sugimoto, Masahiko; Marumoto, Shinji
PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan
SOURCE: PCT Int. Appl., 351 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9603377	A1	19960208	WO 1995-JP1494	19950727
W: AU, CA, CN, CZ, FI, HU, JP, KR, MX, NO, NZ, RU, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2196046	A1	19960208	CA 1995-2196046	19950727
AU 9530866	A	19960222	AU 1995-30866	19950727
AU 686426	B2	19980205		
EP 804416	A1	19971105	EP 1995-926509	19950727
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
CN 1166169	A	19971126	CN 1995-195262	19950727
HU 76923	A2	19980128	HU 1997-248	19950727
JP 10503488	T	19980331	JP 1995-505655	19950727
RU 2152385	C1	20000710	RU 1997-102695	19950727
NO 9700308	A	19970325	NO 1997-308	19970124
FI 9700328	A	19970327	FI 1997-328	19970127
US 5877199	A	19990302	US 1997-791499	19970127
PRIORITY APPLN. INFO.:			GB 1994-15175 A	19940727
			GB 1994-23948 A	19941125
			WO 1995-JP1494 W	19950727

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 125:33473
GI

L7 ANSWER 54 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



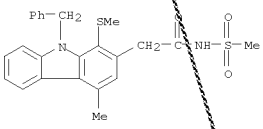
I

AB Title compds. [I; 1 of R1,R2 = H, alkyl, alkanoyl, aryl, etc. and the other = H, alkyl, aryl(alkyl); R3 = H, amino-protective group; 1 of Y1-Y4 = CO2H, SO2NH2, carboxyalkyl(oxy), etc. and the others = H, halo, alkyl, alkoxy, etc.; W = CH2, CH, SO0-2; Z = CH2,CH, NH, N; dashed line = optional bond] were prepared Data for effect of prepared I on acetylcholine binding were given.

IT 177550-07-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of heterocyclic compds. useful as allosteric effectors at muscarinic receptors)

RN 177550-07-1 CAPLUS

CN 9H-Carbazole-2-acetamide, 4-methyl-N-(methylsulfonyl)-1-(methylthio)-9-(phenylmethyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 55 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

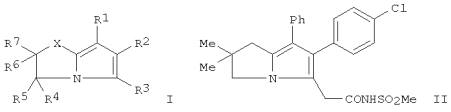
ACCESSION NUMBER: 1996:155517 CAPLUS
DOCUMENT NUMBER: 124:202010
ORIGINAL REFERENCE NO.: 124:37341a,37344a
TITLE: Preparation of N-sulfonylpyrrolizineacetamides and analogs as cyclooxygenase and lipoxygenase inhibitors
INVENTOR(S): Laufer, Stefan; Striegel, Hans Guenther; Dannhardt, Gerd
PATENT ASSIGNEE(S): Merckle GmbH, Germany
SOURCE: Ger. Offen., 22 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4419247	A1	19951207	DE 1994-4419247	19940601
CA 2191746	A1	19951207	CA 1995-2191746	19950531
CA 2191746	C	20070410		
WO 9532972	A1	19951207	WO 1995-EP2079	19950531
W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TT, UA, US, UZ, VN				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9526730	A	19951221	AU 1995-26730	19950531
EP 763037	A1	19970319	EP 1995-921801	19950531
EP 763037	B1	20011114		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 10506370	T	19980623	JP 1996-500334	19950531
JP 3671303	B2	20050713		
AT 208777	T	20011115	AT 1995-921801	19950531
ES 2166823	T3	20020501	ES 1995-921801	19950531
PT 763037	E	20020531	PT 1995-921801	19950531
NO 9605095	A	19961129	NO 1996-5095	19961129
NO 310076	B1	20010514		
FI 9604773	A	19970127	FI 1996-4773	19961129
FI 114099	B1	20040813		
US 5942535	A	19990824	US 1997-737921	19970328

L7 ANSWER 55 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

PRIORITY APPLN. INFO.: DE 1994-4419247 A 19940601
WO 1995-EP2079 W 19950531

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 124:202010
GI



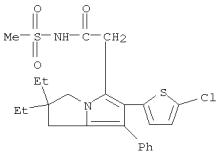
I II

AB Title compds. [I; 2 of R1-R3 = H or (hetero)aryl and the other = COCO2H, alkoxycarbonyl, sulfonylcarbamoylalkyl, etc.; R4-R7 = H or alkyl; 2 vicinal R4-R7 = bond; X = CH2, O, S, (alkyl)imino, etc] were prepared Thus, title compound II had IC50 of 2.3x10-7 and 1.5x10-7 (units not given) against lipoxygenase and cyclooxygenase, resp.

IT 174347-96-7P 174347-97-8P 174347-98-9P
174347-99-0P 174348-07-3P 174348-08-4P
174348-09-5P 174348-10-8P 174348-11-9P
174348-12-0P 174348-14-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of N-sulfonylpyrrolizineacetamides and analogs as cyclooxygenase and lipoxygenase inhibitors)

RN 174347-96-7 CAPLUS

CN 1H-Pyrrolizine-5-acetamide, 6-(5-chloro-2-thienyl)-2,2-diethyl-2,3-dihydro-N-(methylsulfonyl)-7-phenyl- (CA INDEX NAME)

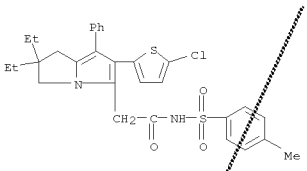


RN 174347-97-8 CAPLUS

CN 1H-Pyrrolizine-5-acetamide, 6-(5-chloro-2-thienyl)-2,2-diethyl-2,3-dihydro-

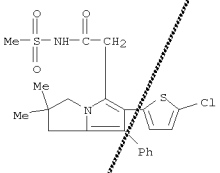
L7 ANSWER 55 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

N-[(4-methylphenyl)sulfonyl]-7-phenyl- (CA INDEX NAME)



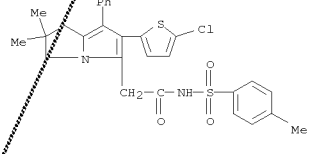
RN 174347-98-9 CAPLUS

CN 1H-Pyrrolizine-5-acetamide, 6-(5-chloro-2-thienyl)-2,3-dihydro-2,2-dimethyl-N-(methylsulfonyl)-7-phenyl- (CA INDEX NAME)



RN 174347-99-0 CAPLUS

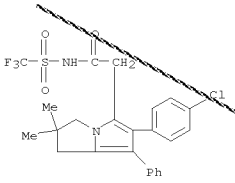
CN 1H-Pyrrolizine-5-acetamide, 6-(5-chloro-2-thienyl)-2,3-dihydro-2,2-dimethyl-N-[(4-methylphenyl)sulfonyl]-7-phenyl- (CA INDEX NAME)



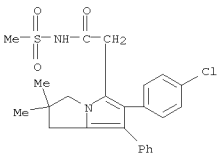
RN 174348-07-3 CAPLUS

CN 1H-Pyrrolizine-5-acetamide, 6-(4-chlorophenyl)-2,3-dihydro-2,2-dimethyl-7-phenyl-N-[(trifluoromethyl)sulfonyl]- (CA INDEX NAME)

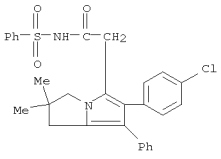
L7 ANSWER 55 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 174348-08-4 CAPLUS
CN 1H-Pyrrolizine-5-acetamide, 6-(4-chlorophenyl)-2,3-dihydro-2,2-dimethyl-N-(methylsulfonyl)-7-phenyl- (CA INDEX NAME)

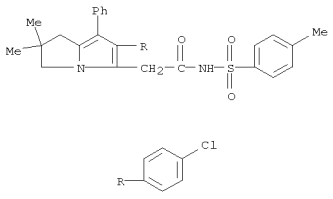


RN 174348-09-5 CAPLUS
CN 1H-Pyrrolizine-5-acetamide, 6-(4-chlorophenyl)-2,3-dihydro-2,2-dimethyl-7-phenyl-N-(phenylsulfonyl)- (CA INDEX NAME)

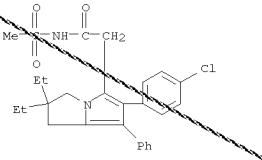


RN 174348-10-8 CAPLUS
CN 1H-Pyrrolizine-5-acetamide, 6-(4-chlorophenyl)-2,3-dihydro-2,2-dimethyl-N-

L7 ANSWER 55 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
[(4-methylphenyl)sulfonyl]-7-phenyl- (CA INDEX NAME)

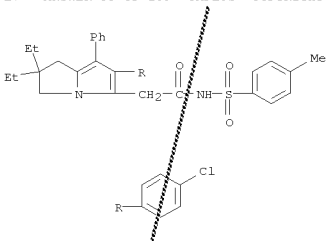


RN 174348-11-9 CAPLUS
CN 1H-Pyrrolizine-5-acetamide, 6-(4-chlorophenyl)-2,2-diethyl-2,3-dihydro-N-(methylsulfonyl)-7-phenyl- (CA INDEX NAME)

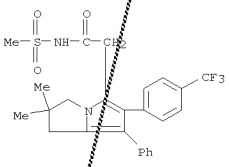


RN 174348-12-0 CAPLUS
CN 1H-Pyrrolizine-5-acetamide, 6-(4-chlorophenyl)-2,2-diethyl-2,3-dihydro-N-[(4-methylphenyl)sulfonyl]-7-phenyl- (CA INDEX NAME)

L7 ANSWER 55 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 174348-14-2 CAPLUS
CN 1H-Pyrrolizine-5-acetamide, 2,3-dihydro-2,2-dimethyl-N-(methylsulfonyl)-7-phenyl-6-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

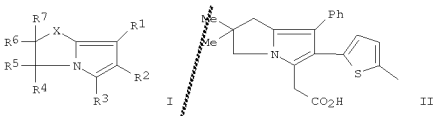
L7 ANSWER 56 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1996:155516 CAPLUS
DOCUMENT NUMBER: 124:202009
ORIGINAL REFERENCE NO.: 124:37341a,37344a
TITLE: Preparation of heteroarylpyrrolizineacetates and analogs as cyclooxygenase and lipoxygenase inhibitors
INVENTOR(S): Laufer, Stefan; Striegel, Hans Guenther; Dannhardt, Gerd
PATENT ASSIGNEE(S): Merckle GmbH, Germany
SOURCE: Ger. Offen., 25 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

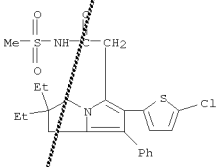
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4419246	A1	19951207	DE 1994-4419246	19940601
CA 2191747	A1	19951207	CA 1995-2191747	19950531
CA 2191747	C	20070123		
WO 9532970	A1	19951207	WO 1995-EP2077	19950531
W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TT, UA, US, UZ, VN				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9526728	A	19951221	AU 1995-26728	19950531
EP 763036	A1	19970319	EP 1995-921799	19950531
EP 763036	B1	20020911		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 10506368	T	19980623	JP 1996-500332	19950531
JP 3671302	B2	20050713		
AT 223917	T	20020915	AT 1995-921799	19950531
PT 763036	E	20021231	PT 1995-921799	19950531
ES 2182903	T3	20030316	ES 1995-921799	19950531
US 5958943	A	19990928	US 1996-737919	19960328
NO 9605093	A	19961129	NO 1996-5093	19961129
NO 310291	B1	20010618		
FI 9604771	A	19970127	FI 1996-4771	19961129
FI 113964	B1	20040715		

PRIORITY APPLN. INFO.: DE 1994-4419246 A 19940601
WO 1995-EP2077 W 19950531

L7 ANSWER 56 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 124:202009
GI

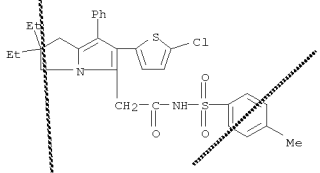


AB Title compds. [I; 1 of R1-R3 = heteroaryl, 1 of the remaining = H or (hetero)aryl, and the remaining = H, CHO, carboxy(alkyl), alkoxycarbonyl, etc.; R4-R7 = H or alkyl; 2 of vicinal R4-R7 = bond; X = CH2, CO, O, S, etc.] were prepared Thus, title compound II had IC50 of 4x10-7 and 2x10-7
(units not given) against lipoxygenase and cycloxygenase, resp.
IT 174347-96-7P 174347-97-8P 174347-98-9P
174347-99-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of heteroarylpyrrolizineacetates and analogs as cyclooxygenase
and lipoxygenase inhibitors)
RN 174347-96-7 CAPLUS
CN 1H-Pyrrolizine-5-acetamide, 6-(5-chloro-2-thienyl)-2,2-diethyl-2,3-dihydro-N-(methylsulfonyl)-7-phenyl- (CA INDEX NAME)

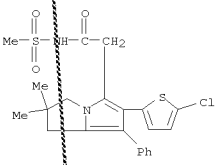


RN 174347-97-8 CAPLUS
CN 1H-Pyrrolizine-5-acetamide, 6-(5-chloro-2-thienyl)-2,2-diethyl-2,3-dihydro-N-[(4-methylphenyl)sulfonyl]-7-phenyl- (CA INDEX NAME)

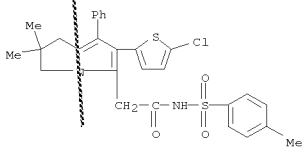
L7 ANSWER 56 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 174347-98-9 CAPLUS
CN 1H-Pyrrolizine-5-acetamide, 6-(5-chloro-2-thienyl)-2,3-dihydro-2,2-dimethyl-N-(methylsulfonyl)-7-phenyl- (CA INDEX NAME)



RN 174347-99-0 CAPLUS
CN 1H-Pyrrolizine-5-acetamide, 6-(5-chloro-2-thienyl)-2,3-dihydro-2,2-dimethyl-N-[(4-methylphenyl)sulfonyl]-7-phenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD
(6 CITINGS)

L7 ANSWER 57 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1996:148174 CAPLUS
DOCUMENT NUMBER: 124:274366
ORIGINAL REFERENCE NO.: 124:50511a,50514a
TITLE: Silver halide photographic material containing dye with lens residual color
INVENTOR(S): Harada, Tooru; Arai, Naoki
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07333784	A	19951222	JP 1994-122666	19940603

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PRIORITY APPLN. INFO.: JP 1994-122666 19940603
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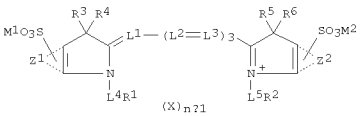
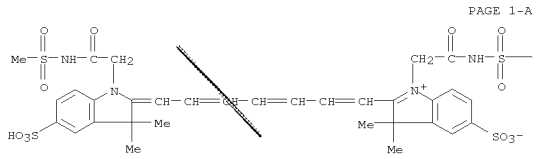
GI



AB The material has a hydrophilic colloidal layer containing ≥1 dye I [Z1-2 = nonmetal atoms to form benzo or naphtho condensed ring; L4-5 = C1-4 alkylene, R1-2 = CONHA, SO2NHA; A = COR7, SO2R7; R7 = alkyl; R3-6 = alkyl, R3 and R4 or R5 and R6 may form a ring; L1-3 = methine (which may link to form 5- or 6-membered ring); M1-2 = alkali metal salt, ammonium salt, neg. charge; X = anion; n = 1-2, when inner salt is formed, n = 1]. The material shows good storage stability and less residual color after processing.
IT 175220-19-6 175220-22-1
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(photog. film containing dye in surface protective layer)
RN 175220-19-6 CAPLUS
CN 3H-Indolium, 2-[7-[1,3-dihydro-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-5-sulfo-2H-indol-2-ylidene]-1,3,5-heptatrien-1-yl]-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-5-sulfo-, inner salt, potassium salt (1:1) (CA INDEX NAME)

L7 ANSWER 57 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

PAGE 1-A

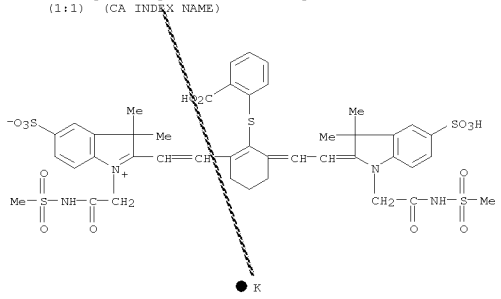


K

PAGE 1-B

Me

RN 175220-22-1 CAPLUS
CN 3H-Indolium, 2-[2-[2-[(2-carboxyphenyl)thio]-3-[2-[1,3-dihydro-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-5-sulfo-2H-indol-2-ylidene]ethylidene]-1-cyclohexen-1-yl]ethenyl]-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-5-sulfo-, inner salt, potassium salt (1:1) (CA INDEX NAME)



K

L7 ANSWER 58 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1996:34578 CAPLUS
DOCUMENT NUMBER: 124:71507
ORIGINAL REFERENCE NO.: 124:13117a,13120a
TITLE: Direct positive silver halide color photographic material and image formation with improved background whiteness and processing stability
INVENTOR(S): Sasagawa, Masayuki; Ookawachi, Susumu
PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 36 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07253631	A	19951003	JP 1994-45937	19940316

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PRIORITY APPLN. INFO.: JP 1994-45937 19940316
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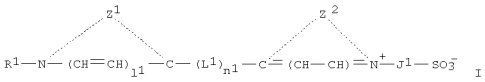
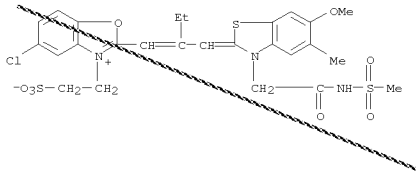


I

AB In the title photog. material having a photosensitive layer containing preunfogged inner latent image type Ag halide grains and a nonphotosensitive layer, ≥1 photosensitive emulsion layer contains compound I (Z1, Z2 = non-metallic atoms required to form 5- or 6-membered ring; L1 = methine; R1 = -J2SO2NH2, -J3CONHCOR2, -J4CONHSO2R3, -J5SO2NHCOR4, J6SO2NHSO2R5; J1-6, R2-5 = alkylene; l1, l2 = 0, 1; n = odd integer), and the total swelling degree of the emulsion layer-containing side comparing to the support ranges from 80-200%.
IT 172415-58-6
RL: DEV (Device component use); USES (Uses)
(sensitizing dye contained in direct pos. photog. material)
RN 172415-58-6 CAPLUS
CN Benzoxazolium, 5-chloro-2-[2-[[6-methoxy-5-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-(2-sulfoethyl)-, inner salt (CA INDEX NAME)

L7 ANSWER 58 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



L7 ANSWER 59 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1995:990998 CAPLUS
DOCUMENT NUMBER: 124:131426
ORIGINAL REFERENCE NO.: 124:24175a,24178a
TITLE: Supersensitizing bisbenzothiazolocyanine dye combination for red-sensitive silver halide emulsion
INVENTOR(S): Preddy, Carl R.; Holtzclaw, John V.
PATENT ASSIGNEE(S): Eastman Kodak Co., USA
SOURCE: U.S., 7 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5464735	A	19951107	US 1993-163969	19931207

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PRIORITY APPLN. INFO.: US 1993-163969 19931207
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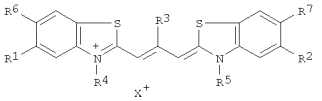
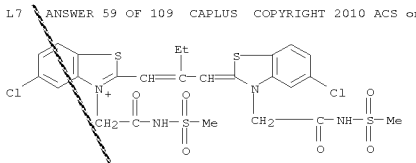
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 124:131426
GI



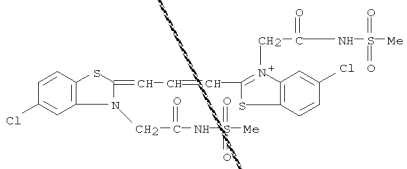
I

AB There is disclosed a photog. material comprising a layer of a silver halide emulsion containing a sensitizing combination of a first dye represented by the formula I (R1, R2 = halogen; R3 = H; R4, R5 = R8CONHSO2R9- or -R9CONHSO2R8 where R8 = alkyl; R9 = alkylene; R6, R7 = H, alkyl, or alkoxy; X+ = a monovalent cation) and a second dye represented by the formula I (R1, R2 = H, halogen, alkyl, or alkoxy; R3 = alkyl; R4, R5 = sulfoalkyl, carboxyalkyl, sulfoalkylcarbamoylalkyl, sulfoalkylcarbamidoalkyl, sulfo(hydroxy)alkyl, R8CONHSO2R9- or -R9CONHSO2R8 where R8 = alkyl; R9 = alkylene; R6, R7 = H or alkoxy; X+ = a monovalent cation).
IT 173307-54-5 173307-55-6 173307-56-7
173307-57-8 173307-58-9
RL: TEM (Technical or engineered material use); USES (Uses)
(red-sensitive silver halide emulsion supersensitization using bisbenzothiazolocyanine dye combinations containing)
RN 173307-54-5 CAPLUS
CN Benzothiazolium, 5-chloro-2-[2-[[5-chloro-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]- (CA INDEX NAME)

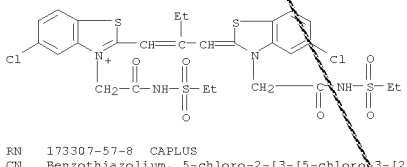
L7 ANSWER 59 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 173307-55-6 CAPLUS
CN Benzothiazolium, 5-chloro-2-[3-[5-chloro-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2(3H)-benzothiazolylidene]-1-propen-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]- (CA INDEX NAME)

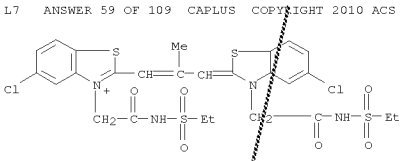


RN 173307-56-7 CAPLUS
CN Benzothiazolium, 5-chloro-3-[2-[[5-chloro-3-[2-[(ethylsulfonyl)amino]-2-oxoethyl]-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-[2-[(ethylsulfonyl)amino]-2-oxoethyl]- (CA INDEX NAME)

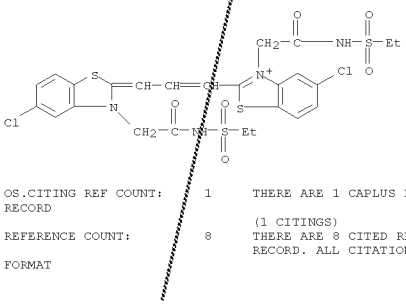


RN 173307-57-8 CAPLUS
CN Benzothiazolium, 5-chloro-2-[3-[5-chloro-3-[2-[(ethylsulfonyl)amino]-2-oxoethyl]-2(3H)-benzothiazolylidene]-2-methyl-1-propen-1-yl]-3-[2-[(ethylsulfonyl)amino]-2-oxoethyl]- (CA INDEX NAME)

L7 ANSWER 59 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 173307-58-9 CAPLUS
CN Benzothiazolium, 5-chloro-2-[3-[5-chloro-3-[2-[(ethylsulfonyl)amino]-2-oxoethyl]-2(3H)-benzothiazolylidene]-1-propen-1-yl]-3-[2-[(ethylsulfonyl)amino]-2-oxoethyl]- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 60 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1995:951720 CAPLUS
DOCUMENT NUMBER: 124:101746
ORIGINAL REFERENCE NO.: 124:18749a,18752a
TITLE: Silver halide photographic material spectrally sensitized by cyanine dye
INVENTOR(S): Kita, Noryasu; Kagawa, Nobuaki
PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 51 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07209792	A	19950811	JP 1994-2731	19940114

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PRIORITY APPLN. INFO.: JP 1994-2731 19940114
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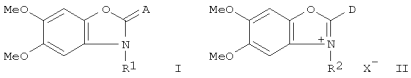
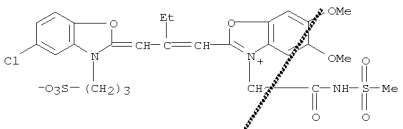
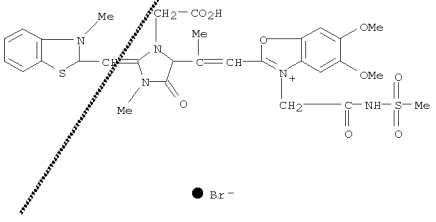


AB The claimed photog. material has at least one Ag halide emulsion layer spectrally sensitized by a merocyanine dye I (R1 = C1-10 aliphatic group with water-solubilizing substituent; A = group forming a merocyanine dye and linked through conjugated bonds with the oxazole moiety) or cyanine dye II (R2 = C1-10 aliphatic group with water-solubilizing substituent; D = group forming a cyanine dye and linked through conjugated bonds with the oxazole moiety; X- = counter ion). The spectral sensitizers increase both photog. speed and wash off property resulting in low residual dye stain. They are suited for color papers and medical x-ray films of rapid processing types.
IT 172356-56-8 172356-99-9
RL: DEV (Device component use); USES (Uses)
(silver halide photog. material spectrally sensitized by cyanine dye)
RN 172356-56-8 CAPLUS
CN Benzoxazolium, 2-[2-[[5-chloro-3-(3-sulfopropyl)-2(3H)-benzoxazolylidene]methyl]-1-buten-1-yl]-5,6-dimethoxy-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

L7 ANSWER 60 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 172356-99-9 CAPLUS
CN Benzoxazolium, 2-[2-[[3-(carboxymethyl)-2-[(2,3-dihydro-3-methyl-2-benzothiazolyl)methylene]-1-methyl-5-oxo-4-imidazolidinyl]-1-propen-1-yl]-5,6-dimethoxy-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)



L7 ANSWER 61 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1995:773037 CAPLUS
DOCUMENT NUMBER: 123:270636
ORIGINAL REFERENCE NO.: 123:48163a,48166a
TITLE: Silver halide photographic material spectrally sensitized by trinuclear cyanine and containing hydrazine for enhanced contrast
INVENTOR(S): Yoshida, Tetsuo
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 53 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07120863	A	19950512	JP 1993-286148	19931022

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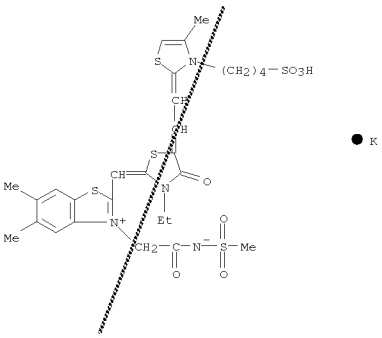
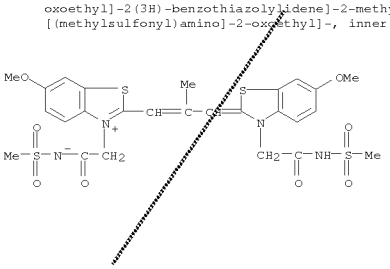
JP 3038462 B2 20000508
PRIORITY APPLN. INFO.: JP 1993-286148 19931022
<--
GI For diagram(s), see printed CA Issue.
AB The photog. material contains (1) a hydrazine derivative R1N(A1)N(A2)G1R2 (R1 = aliphatic or aromatic substituent; R2, R3 = H, alkyl, aryl, unsatd. heterocyclic ring, alkoxy, aryloxy, amino, hydrazine, etc.; G1 = CO, SO2, SO, POR3, COCO, thiocarbonyl, iminomethylene; A1, A2 = H, alkylsulfonyl, arylsulfonyl, acyl) and (2) a spectral sensitizer I (Z1, Z2, Z3 = 5- or 6-membered N-containing heterocyclic ring; R1, R2, R3 = H, alkyl, aryl, heterocyclic ring; at least 2 of R1, R2, and R3 are organic groups with water-solubilizing groups; L1-L7 = methyne; n, m = 0, 1; M1 = counter ion). The material has high contrast and is suitable for scanners and laser image recording. It is little affected by exhaustion of a developer solution
IT 168409-33-4
RL: TEM (Technical or engineered material use); USES (Uses)
(Ag halide photog. material spectrally sensitized by trinuclear cyanine and containing hydrazine for enhanced contrast)
RN 168409-33-4 CAPLUS
CN Benzothiazolium, 2-[[3-ethyl-5-[2-[4-methyl-3-(4-sulfobutyl)-2(3H)-thiazolylidene]ethylidene]-4-oxo-2-thiazolidinylidene]methyl]-5,6-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt, potassium salt (1:1) (CA INDEX NAME)

L7 ANSWER 61 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



L7 ANSWER 62 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
oxoethyl]-2(3H)-benzothiazolylidene]-2-methyl-1-propen-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

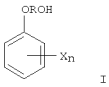


L7 ANSWER 62 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1995:753716 CAPLUS
DOCUMENT NUMBER: 123:301415
ORIGINAL REFERENCE NO.: 123:53775a,53778a
TITLE: Silver halide photographic materials providing low residual color
INVENTOR(S): Kuno, Koichi; Suga, Shuzo
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 32 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07128779	A	19950519	JP 1993-293825	19931101
US 5589325	A	19961231	US 1996-589210	19960122

PRIORITY APPLN. INFO.: JP 1993-293825 A 19931101
US 1994-331193 B1 19941028

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
GI



I

AB The materials comprise supports coated with Ag halide emulsions that are spectrally sensitized by DYE-Gn or DYE-G-n [DYE = methyne dye; n = 1, 3; G, G- = substituent T1G1NHG2 or T1G1N-G2 (T1 = linking group; G1 = CO, SO, SO2; G2 = COT2, SOT2, SO2T2, CN; T2 = monovalent group)] and contains a phenoxy alc. I [R = alkylene, X = halo, NO2, alkyl, (substituted) amino, COR2, SO3M [R2 = H, OM, alkyl, alkoxy, (substituted) amino; M, alkali metal, monovalent cation]; n = 0-5]. The materials show high sensitivity and low residual color.
IT 165594-05-8
RL: TEM (Technical or engineered material use); USES (Uses)
(Ag halide photog. material containing spectral sensitizing dye and phenoxy alc. for low residual color stain)
RN 165594-05-8 CAPLUS
CN Benzothiazolium, 6-methoxy-2-[3-[6-methoxy-3-[2-[(methylsulfonyl)amino]-2-

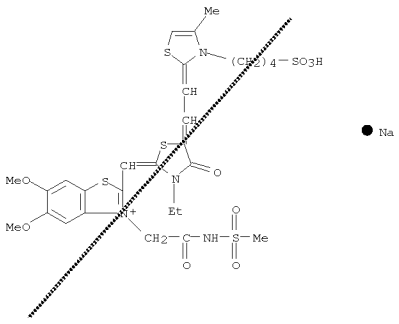
L7 ANSWER 63 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1995:746412 CAPLUS
DOCUMENT NUMBER: 124:41266
ORIGINAL REFERENCE NO.: 124:7609a,7612a
TITLE: Image forming method by hydrazine-containing silver halide photographic material spectrally sensitized by trinucleic cyanine
INVENTOR(S): Yoshida, Tetsuo
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 59 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07120893	A	19950512	JP 1993-287316	19931025

PRIORITY APPLN. INFO.: JP 1993-287316 19931025

AB The photog. material, having ≥1 Ag halide emulsion layer (≥50 mol% AgCl) and containing hydrazine compound R1NA1NA2G1R2 [R1 = aliphatic, aromatic; R2 = H, alkyl, aryl, unsatd. heterocyclic, etc.; G1 = CO, SO2, SO, COCO, CS, iminomethylene; A1, A2 = H, (substituted) alkyl, aryl, etc.] and a spectral sensitizer I (L1-7 = methyne), is developed by a dihydroxybenzene-free developer containing PC(:Y)C(R1):C(R2)Q [R1, R2 = OH, (substituted) amino, SH, alkylthio; P, Q = OH, carboxyl, alkoxy, (substituted) alkylsulfo, amino, aryl; Y = O, NR3; R3 = H, OH, (substituted) alkyl, acyl]. The photog. material may contain a nucleating accelerator of amines, disulfides, oniums, and/or hydroxymethyl compds. The material gives an image with high contrast suitable for graphic arts.
IT 168091-51-8
RL: DEV (Device component use); USES (Uses)
(sensitizer; development of hydrazine-containing Ag halide photog. material spectrally sensitized by trinucleic cyanine by hydroxybenzene-free developer)
RN 168091-51-8 CAPLUS
CN Benzothiazolium, 2-[[3-ethyl-5-[2-[4-methyl-3-(4-sulfobutyl)-2(3H)-thiazolylidene]ethylidene]-4-oxo-2-thiazolidinylidene]methyl]-5,6-dimethoxy-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, sodium salt (1:1) (CA INDEX NAME)

L7 ANSWER 63 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



L7 ANSWER 64 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1995:712005 CAPLUS
DOCUMENT NUMBER: 123:97735
ORIGINAL REFERENCE NO.: 123:17179a,17182a
TITLE: Methine compounds and silver halide photographic materials containing the compound.
INVENTOR(S): Inagaki, Yoshio; Suga, Shuzo
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 57 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 638841	A2	19950215	EP 1994-108693	19940607
EP 638841	A3	19950913		
EP 638841	B1	20000419		
R: DE, FR, GB				
JP 07056265	A	19950303	JP 1994-125318	19940607
JP 3483049	B2	20040106		
US 5464734	A	19951107	US 1994-257051	19940608

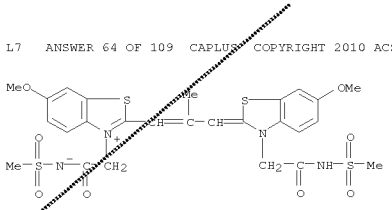
PRIORITY APPLN. INFO.: JP 1993-137462 A 19930608
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 123:97735

AB A Ag halide photog. material contains a compound of formula: (DYE)(G)n or (DYE)(G-) [DYE = a methine dye residue; G and G- each = a substituent for the methine dye residue, and are represented by formulas -T1-G1NHG2 and -T1-G1N-G2 resp.; T1 = a divalent linking group; G1 = a carbonyl group, a sulfinyl group, or a sulfonyl group; G2 = -CO-T2, -SO-T2, -SO2-T2, or a cyano group; and T2 = a monovalent group; n = an integer of from 1 to 6]. The spectral sensitivity of the material is high, and the material has few residual color after processed.

IT 165594-05-8
RL: MOA (Modifier or additive use); USES (Uses)
(photog. sensitizer)

RN 165594-05-8 CAPLUS
CN Benzothiazolium, 6-methoxy-2-[3-[6-methoxy-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2(3H)-benzothiazolylidene]-2-methyl-1-propen-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

L7 ANSWER 64 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



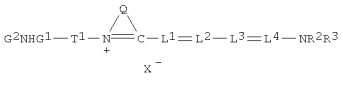
NO. CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

L7 ANSWER 65 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

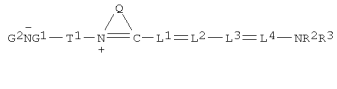
ACCESSION NUMBER: 1995:693795 CAPLUS
DOCUMENT NUMBER: 123:183362
ORIGINAL REFERENCE NO.: 123:32364h,32365a
TITLE: Silver halide photographic materials and methine compounds
INVENTOR(S): Inagaki, Yoshio
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07128782	A	19950519	JP 1993-276653	19931105

PRIORITY APPLN. INFO.: JP 1993-276653 19931105
GI



I



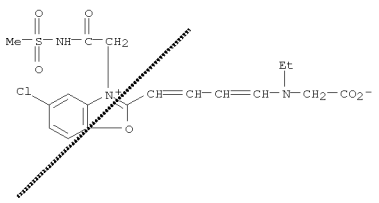
II

AB The photog. materials contain the compound I or II (Q = benzoxazole, thiazoline; L1-4 = methine; T1 = divalent residue; G1 = CO, SO, SO2; G2 = COT2, SOT2, SO2T2, CN; T2 = monovalent residue; R2-3 = alkyl, alkylene forming heterocycle; X- = anion). The methine compds. I and II are claimed. The materials prevent residual color stains.

IT 167687-00-5
RL: DEV (Device component use); USES (Uses)
(hemicyanine spectral sensitizing dyes for silver halide photog. materials)

RN 167687-00-5 CAPLUS
CN Benzoxazolium, 2-[4-[(carboxymethyl)ethylamino]-1,3-butadien-1-yl]-5-chloro-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

L7 ANSWER 65 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



L7 ANSWER 66 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1995:661173 CAPLUS
DOCUMENT NUMBER: 124:8801
ORIGINAL REFERENCE NO.: 124:1861a,1864a
TITLE: Substituted indole-, indene-, pyranoindole- and tetrahydrocarbazolealkanoic acid derivatives as inhibitors of PLA2 and lipoxygenase
INVENTOR(S): Musser, John H.; Kreft, Anthony F., III; Failli, Amedeo A.; Demerson, Christopher A.; Shah, Uresh S.; Nelson, James A.
PATENT ASSIGNEE(S): American Home Products Corporation, USA
SOURCE: U.S., 35 pp. Cont.-in-part of U.S. 5,229,516. CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5420289	A	19950530	US 1993-29199	19930310
CA 2090042	A1	19910428	CA 1990-2090042	19901027
US 5229516	A	19930720	US 1992-911434	19920710
PRIORITY APPLN. INFO.:			US 1989-428260	B2 19891027
			US 1990-596134	B2 19901011
			US 1992-911434	A2 19920710
			CA 1990-2070422	A3 19901027

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): CASREACT 124:8801; MARPAT 124:8801
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB This invention relates to substituted indole derivs. A(CH2)nOB wherein A =

I or II wherein R1 is hydrogen, lower alkyl, Ph or Ph substituted with trifluoromethyl; R2 is hydrogen or lower alkyl; or R1 and R2 taken together form a benzene ring; R3 is hydrogen or lower alkyl; n is 1-2; B is III-VII wherein R4 is, e.g., CO2R2, m is 0-3; R5 is A(CH2)nOC6H4 or Ph or Ph substituted by halo, lower alkylthio, lower alkylsulfinyl or lower alkylsulfonyl; R6 is A(CH2)nO or halo; R7 is lower alkyl; Y is CH2 or O; R8 is lower alkyl or (CH2)mCO2R3 ; R9 is COR10 or (CH2)oR10, o is 1-4; R10

is lower alkyl, Ph, Ph substituted with carboxy, halo, lower alkyl, loweralkylthio or loweralkylsulfinyl; naphthyl, pyridyl, furanyl,

L7 ANSWER 66 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

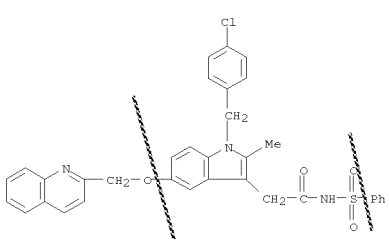
quinolinyl, or 2-R14-thiazolyl; R11 is lower alkyl or phenyl; R12 is hydrogen or loweralkylcarbonyl R13 is hydrogen, hydroxy, lower alkyl or lower alkoxy; R14 is Ph or halophenyl; Z2 is hydrogen, lower alkyl or N(CH3)OH; and the pharmacol. acceptable salts thereof possessing lipoxygenase inhibitory, phospholipase A2 inhibitory and leukotriene antagonist activity, which are useful as anti-inflammatory, antiallergic and cytoprotective agents. Thus, e.g., condensation of 2-methyl-5-(2-quinolinylmethoxy)indene-3-acetic acid Et ester (prepn. given, mixt. of endo and exo isomers) with p-chlorobenzaldehyde afforded

3-[(4-chlorophenyl)methylene]-2-methyl-6-(2-quinolinylmethoxy)-3H-indene-1-acetic acid [VIII, Q = 2-quinolinylmethyl, mixt. of Z (major) and E (minor) isomers]. The specificity of action of PLA2 inhibitors can be detd. by the activity of test compds. to inhibit the synthesis of LTB4 by rat glycogen-elicited polymorphonuclear leukocytes (PMN) in the presence of exogenous substrate: VIII demonstrated 96% inhibition at 10 mM. VIII also inhibited the synthesis of the arachidonic acid cyclooxygenase oxidn.

product PGE2 with 81% inhibition at 10 mM. VIII inhibited the release of arachidonic acid from an arachidonic acid-contg. substrate by the action of phospholipase A2 enzyme from human synovial fluid with IC50 = 9.7 mM. Further assays demonstrated that the compds. of the invention exerted an inhibitory effect on both the lipoxygenase pathway and the cyclooxygenase pathway and have significant leukotriene (LTD4) antagonist activity. The compds. of the invention inhibited the acute inflammatory response and inhibited 5-lipoxygenase in human whole blood.

IT 135872-84-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(substituted indole-, indene-, pyranoindole- and tetrahydrocarbazolealkanoic acid derivs. as inhibitors of PLA2 and lipoxygenase)

RN 135872-84-3 CAPLUS
CN 1H-Indole-3-acetamide, 1-[(4-chlorophenyl)methyl]-2-methyl-N-(phenylsulfonyl)-5-(2-quinolinylmethoxy)- (CA INDEX NAME)



OS.CITING REF COUNT: 23 THERE ARE 23 CAPLUS RECORDS THAT CITE THIS RECORD (23 CITINGS)

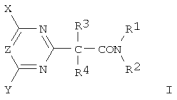
L7 ANSWER 66 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 67 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1995:641018 CAPLUS
DOCUMENT NUMBER: 123:286097
ORIGINAL REFERENCE NO.: 123:51275a,51278a
TITLE: Pyrimidinyl alkanoic acid amide derivatives, salts, and herbicidal compositions
INVENTOR(S): Yoshimura, Takumi; Toriyabe, Keiji; Masuda, Katsumi; Hanai, Ryo
PATENT ASSIGNEE(S): Kumiai chemical industry co., ltd., Japan; Ihara chemical industry co., ltd.
SOURCE: U.S., 30 pp. Cont.-in-part of U.S. Ser. No. 916,127.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 5418212	A	19950523	US 1993-53008		19930427
US 5411934	A	19950502	US 1992-916127		19920730
PRIORITY APPLN. INFO.:			JP 1990-330168	A	19901130
			US 1992-916127	A2	19920730
			WO 1991-JP1649	W	19911129

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): CASREACT 123:286097; MARPAT 123:286097
GI

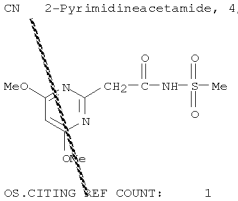


I

AB The present invention provides a novel alkanoic acid amide derivative of the formula I [wherein R1 is a hydrogen atom, an alkyl group or an alkoxyalkoxy group, R2 is a group of SO2R (R = e.g., alkyl) or a hydroxyl group, R5 is an alkyl group, R3 is an alkyl group, a cycloalkyl group, a cycloalkenyl group or a Ph group, R4 is a hydrogen atom or an alkyl group, X and Y may be the same or different and are an alkoxy group, an alkylamino group or a dialkylamino group, and Z is a nitrogen atom] and its salt, a process for prepg. the same and a herbicidal compn. contg. the same as an effective ingredient. This compd. kills annual and perennial weeds grown in paddy fields and upland fields at a small dose, and is safe to a useful crop plant. Thus, e.g., 2-(4,6-dimethoxypyrimidin-2-yl)-3-methylbutyric acid (prepn. given) was treated with carbonyldiimidazole in THF to afford 2-(4,6-dimethoxypyrimidin-2-yl)-3-methylbutyrylimidazole (86.7% yield); amidation of the latter with methanesulfonamide afforded 2-(4,6-dimethoxypyrimidin-2-yl)-3-methyl-N-methylsulfonylbutyric acid amide (76.8% yield) which demonstrated an herbicidal effect of at least 90% against barnyardgrass, monochoria, and bulrush.

IT 140704-78-5P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(pyrimidinyl alkanoic acid amide derivs., salts, and herbicidal compns.)

RN 140704-78-5 CAPLUS
CN 2-Pyrimidineacetamide, 4,6-dimethoxy-N-(methylsulfonyl)- (CA INDEX NAME)

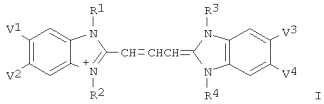


OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

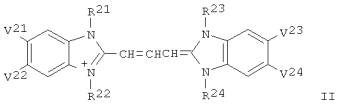
L7 ANSWER 68 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1995:459462 CAPLUS
DOCUMENT NUMBER: 122:201055
ORIGINAL REFERENCE NO.: 122:36503a,36506a
TITLE: Silver halide photographic material for super high-contrast images
INVENTOR(S): Yamazaki, Kazuki; Okazaki, Masaki; Fujiwara, Yoshinori
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 53 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
JP 06250322	A	19940909	JP 1993-33722		19930223
US 5480886	A	19960102	US 1994-334362		19941103
PRIORITY APPLN. INFO.:			JP 1992-351136	A	19921207
			JP 1992-352393	A	19921211
			JP 1992-354748	A	19921217
			JP 1992-356502	A	19921222
			JP 1993-33722	A	19930223
			JP 1993-75084	A	19930310
			JP 1993-96449	A	19930401
			US 1993-161580	B1	19931206

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
GI



I

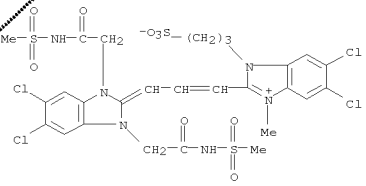


II

AB In the title photog. material, the Ag halide emulsion layer is made of a chemical-sensitized Ag halide particle containing 50% of AgCl containing Rh compound 1x10-8-5x10-6 mol/mol(Ag) and Ir compound 1x10-8-1x10-6 mol/mol(Ag) and is spectrally sensitized by a dye selected from I or II (each R and V is a specified organic group), and a hydrazine compound is contained.

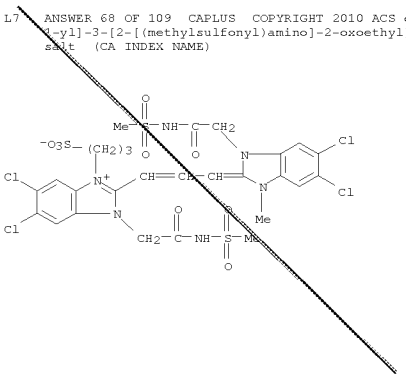
IT 161911-20-2 161911-21-3
RL: DEV (Device component use); USES (Uses)
(sensitizing dye contained in photog. film)

RN 161911-20-2 CAPLUS
CN 1H-Benzimidazolium, 5,6-dichloro-2-[3-[5,6-dichloro-1,3-dihydro-1,3-bis[2-[(methylsulfonyl)amino]-2-oxoethyl]-2H-benzimidazol-2-ylidene]-1-propen-1-yl]-1-methyl-3-(3-sulfopropyl)-, inner salt (CA INDEX NAME)

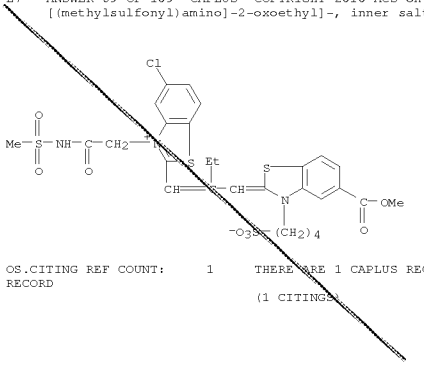


RN 161911-21-3 CAPLUS
CN 1H-Benzimidazolium, 5,6-dichloro-2-[3-[5,6-dichloro-1,3-dihydro-1-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2H-benzimidazol-2-ylidene]-1-propen-

L7 ANSWER 68 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-1-(3-sulfopropyl)-, inner salt (CA INDEX NAME)



L7 ANSWER 69 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

L7 ANSWER 69 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1995:339378 CAPLUS
DOCUMENT NUMBER: 122:118768
ORIGINAL REFERENCE NO.: 122:22027a,22030a
TITLE: silver halide color photographic material
INVENTOR(S): Kuroishi, Masayuki; Ikegawa, Akihiko
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 51 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06138574	A	19940520	JP 1992-309751	19921026

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PRIORITY APPLN. INFO.: JP 1992-309751 19921026
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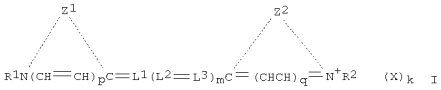
GI



AB A silver halide color photog. material showing improved photosensitivity and granularity without causing increased residual color formation after development comprises ≥1 photosensitive silver halide emulsion layer and ≥1 nonphotosensitive layer, wherein the silver halide grains in the photosensitive silver halide emulsion layer contain ≥4 mol% of AgI and ≥1 of the photog. layers contains ≥1 methine compound represented by the formula I [R1 = (CH2)rCONHSO2R3, (CH2)sSO2NHCOR4, (CH2)tCONHCOR5, or (CH2)uSO2NHSO2R6 where R3-6 = alkyl, alkoxy, or amino; r, s, t, u = an integer of 1-5; R2 = alkyl or R1; Z1, Z2 = a nonmetallic atomic group necessary for forming a 5-6-membered heterocyclic ring; p, q = 0 or 1; L1-3 = a methine group; m = 0, 1, or 2; X = an anion; k = a number necessary to adjust the charge of the compound to 0].
IT 148364-36-7P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation and use of, in silver halide color photog. material)
RN 148364-36-7 CAPLUS
CN Benzothiazolium, 5-chloro-2-[2-[[5-(methoxycarbonyl)-3-(4-sulfobutyl)-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-[2-

L7 ANSWER 70 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:641569 CAPLUS
DOCUMENT NUMBER: 121:241569
ORIGINAL REFERENCE NO.: 121:43861a,43864a
TITLE: Silver halide photographic material
INVENTOR(S): Ikegawa, Akihiko; Kuramitsu, Masayuki; Okazaki, Masaki
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 96 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05265123	A	19931015	JP 1992-94872	19920323
US 5308748	A	19940503	US 1993-35697	19930323

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PRIORITY APPLN. INFO.: JP 1992-94872 A 19920323
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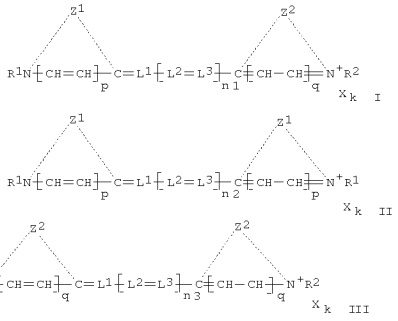
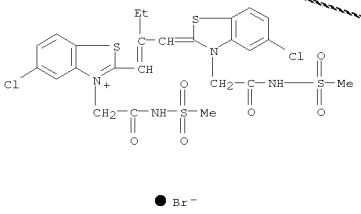
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
GI



AB The title photog. material contains I, and II and/or III [R1 = -(CH2)rCONHSO2R3, -(CH2)sSO2NHCOR4, -(CH2)tCONHCOR5, -(CH2)uSO2NHSO2R6; R3-6 = alkyl, alkoxy, amino; r, s, t, u = 1-5; Z1,2 = non-metallic atoms required to complete a 5- or 6-membered heterocyclic ring; L1-3 = methine;

L7 ANSWER 70 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
n = 0-2; X = anion; k = no. to neutralize charge in mol.; p, q = 0, 1] in its Ag halide photog. emulsion layers. This material shows reduced residual color and high sensitivity.
IT 157158-16-2 157158-18-4
RL: TEM (Technical or engineered material use); USES (Uses)
(photog. sensitizer)
RN 157158-16-2 CAPLUS
CN Benzothiazolium, 5-chloro-2-[2-[[5-chloro-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)



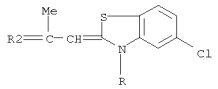
RN 157158-18-4 CAPLUS
CN Benzothiazolium, 5-chloro-2-[3-[5-chloro-3-[2-[[(2-hydroxyethyl)sulfonyl]amino]-2-oxoethyl]-2(3H)-benzothiazolylidene]-2-methyl-1-propen-1-yl]-3-[2-[[(2-hydroxyethyl)sulfonyl]amino]-2-oxoethyl]-, 4-methylbenzenesulfonate (1:1) (CA INDEX NAME)

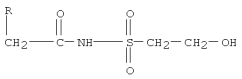
CM 1

CRN 157158-17-3
CMF C26 H27 Cl2 N4 O8 S4

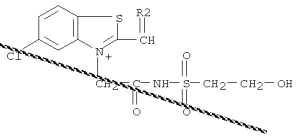
L7 ANSWER 70 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

PAGE 1-A



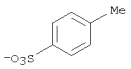


PAGE 2-A



CM 2

CRN 16722-51-3
CMF C7 H7 O3 S



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)

L7 ANSWER 71 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:617485 CAPLUS
DOCUMENT NUMBER: 121:217485
ORIGINAL REFERENCE NO.: 121:39375a,39378a
TITLE: Silver halide photographic photosensitive material
INVENTOR(S): Aida, Shunichi; Ikegawa, Akihiko
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 48 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05297498	A	19931112	JP 1992-125467	19920420

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PRIORITY APPLN. INFO.: JP 1992-125467 19920420
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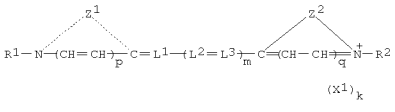
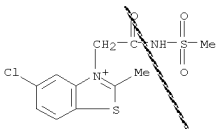
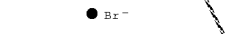
OTHER SOURCE(S): MARPAT 121:217485
GI



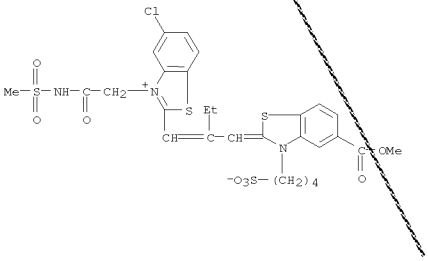
AB In the title material, ≥1 of the Ag halide emulsion layers contains a Ag halide emulsion having a Ag halide grain size <0.3 μm and ≥1 kind(s) of methine compds. I [R1 = (CH2)r-CONHSO2-R3, (CH2)s-SO2NHCO-R4, (CH2)t-CONHCO-R5, (CH2)u-SO2NHSO2-R6; R3-6 = alkyl, alkoxy, amino; r, s, t, u = 1-5; R2 = R1, alkyl; Z1-2 = atoms for forming a 5- or 6-membered heterocyclic ring; p, q = 0, 1; L1-L3 = methine; m = 0, 1, 2; X1 = anion; k = a number for adjusting mol. charge to 0]. The material shows high spectral sensitivity, little residual color after development, and improved graininess.
IT 148350-04-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, for spectral photog. sensitizing dye)
RN 148350-04-3 CAPLUS
CN Benzothiazolium, 5-chloro-2-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)

L7 ANSWER 71 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)





IT 148364-36-7
RL: USES (Uses)
(spectral photog. sensitizing dye)
RN 148364-36-7 CAPLUS
CN Benzothiazolium, 5-chloro-2-[2-[[5-(methoxycarbonyl)-3-(4-sulfobutyl)-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



L7 ANSWER 72 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:617476 CAPLUS
DOCUMENT NUMBER: 121:217476
ORIGINAL REFERENCE NO.: 121:39371a,39374a
TITLE: Silver halide color photographic material
INVENTOR(S): Sakurazawa, Mamoru; Ikegawa, Akihiko
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 81 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05265157	A	19931015	JP 1992-92356	19920319

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PRIORITY APPLN. INFO.: JP 1992-92356 19920319
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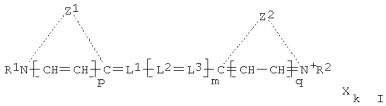
GI

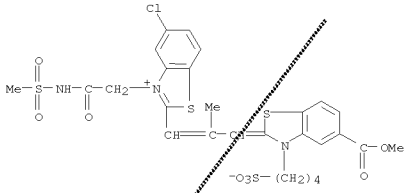


I

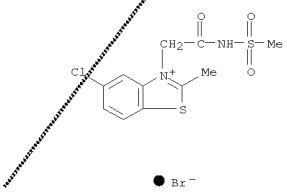
II

AB The title full color photog. material contains I [R1 = -(CH2)rCONHSO2R3, -(CH2)sCONHSO2R4,-(CH2)tCONHSO2R5, -(CH2)uCONHSO2R6; R3-6 = alkyl, alkoxy, amino; r, s, t, u = 1-5; R2 = same as R1 or alkyl; Z1,2 = non-metallic atoms required to complete a 5- or 6-membered heterocyclic ring; L1-3 = methine; m = 0-2; X = anion; k = number to neutralize charge in mol.; p, q = 0, 1], and a magenta coupler II [R1 = H, substituent; Z = non-metallic atoms required to complete a 5-membered azole ring containing 2-4 N's; X = H, group releasable on coupling reaction with oxidized developing agent]. This material shows reduced residual color.
IT 149702-97-6
RL: TEM (Technical or engineered material use); USES (Uses)
(photog. sensitizer)

L7 ANSWER 72 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RN 149702-97-6 CAPLUS
CN Benzothiazolium, 5-chloro-2-[3-[5-(methoxycarbonyl)-3-(4-sulfobutyl)-2(3H)-benzothiazolylidene]-2-methyl-1-propen-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



IT 148350-04-3P, 5-Chloro-3-methanesulfonylaminocarbonylmethyl-2-methylbenzothiazolium bromide
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, photog. sensitizer from)
RN 148350-04-3 CAPLUS
CN Benzothiazolium, 5-chloro-2-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)



L7 ANSWER 73 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:591093 CAPLUS
DOCUMENT NUMBER: 121:191093
ORIGINAL REFERENCE NO.: 121:34483a,34486a
TITLE: methine compound and silver halide photographic material using same
INVENTOR(S): Hioki, Takanori; Ikegawa, Akihiko
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 33 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05273684	A	19931022	JP 1992-98503	19920326

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PRIORITY APPLN. INFO.: JP 1992-98503 19920326
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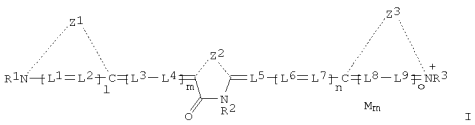
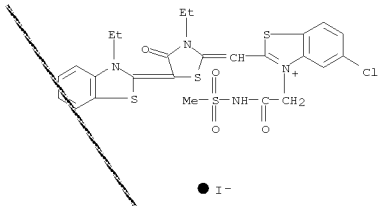
OTHER SOURCE(S): MARPAT 121:191093
GI



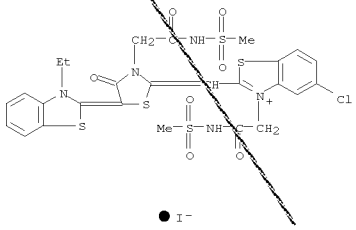
I

AB Claimed are a methine compound I [Z1-3 = atoms required to complete a 5- or 6-membered N-containing heterocyclic ring; L1-9 = methine group; l, o = 0, 1; m, n > 0; M = counter ion; m1 ≥ 0; R1,3 = alkyl; R2 = alkyl, aryl, heterocyclyl]. The title Ag halide photog. material contains ≥1 methine compound claimed above. This material shows high sensitivity and reduced residual color.
IT 157939-94-1 157939-95-2 157939-96-3
RL: USES (Uses)
(photog. sensitizing dye)
RN 157939-94-1 CAPLUS
CN Benzothiazolium, 5-chloro-2-[[3-ethyl-5-(3-ethyl-2(3H)-benzothiazolylidene)-4-oxo-2-thiazolidinylidene]methyl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, iodide (1:1) (CA INDEX NAME)

L7 ANSWER 73 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

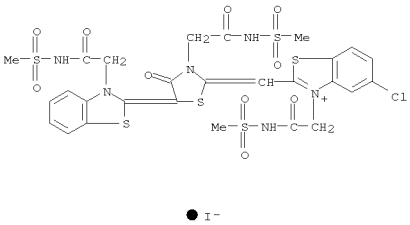


RN 157939-95-2 CAPLUS
CN Benzothiazolium, 5-chloro-2-[[5-(3-ethyl-2(3H)-benzothiazolylidene)-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-4-oxo-2-thiazolidinylidene]methyl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, iodide (1:1) (CA INDEX NAME)



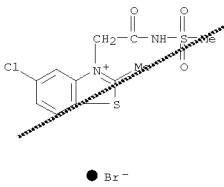
RN 157939-96-3 CAPLUS
CN Benzothiazolium, 5-chloro-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2-[[3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-5-[3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2(3H)-benzothiazolylidene]-4-oxo-2-thiazolidinylidene]methyl]-, iodide (1:1) (CA INDEX NAME)

L7 ANSWER 73 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



● I⁻

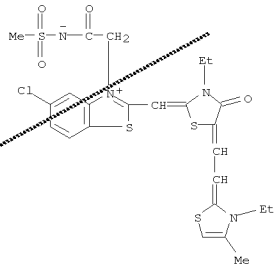
IT 148350-04-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, photog. sensitizing dye from)
RN 148350-04-3 CAPLUS
CN Benzothiazolium, 5-chloro-2-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)



● Br⁻

IT 157940-11-9P
RL: PREP (Preparation)
(preparation of, as photog. sensitizing dye)
RN 157940-11-9 CAPLUS
CN Benzothiazolium, 5-chloro-2-[[3-ethyl-5-[2-(3-ethyl-4-methyl-2(3H)-thiazolylidene)ethylidene]-4-oxo-2-thiazolidinylidene]methyl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

L7 ANSWER 73 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



L7 ANSWER 74 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1994:521597 CAPLUS
DOCUMENT NUMBER: 121:121597
ORIGINAL REFERENCE NO.: 121:21725a,21728a
TITLE: Processing method for high-sensitivity silver halide color photographic photosensitive material
INVENTOR(S): Kuroishi, Masayuki; Ikegawa, Akihiko
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 42 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05297543	A	19931112	JP 1992-125464	19920420

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PRIORITY APPLN. INFO.: JP 1992-125464 19920420
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OTHER SOURCE(S): MARPAT 121:121597
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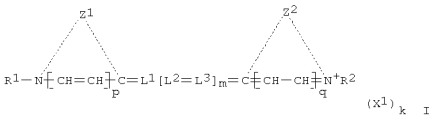
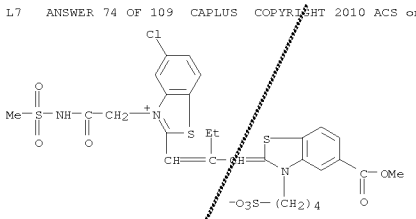
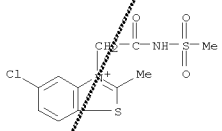


AB The title method processes a Ag halide color photog. photosensitive material containing ≥1 kind(s) of methine compds. I [R1 = (-CH2-)r-CONHSO2-R3, (-CH2-)s-SO2NHCOR4, (-CH2-)t-CONHCO-R5, (-CH2-)u-SO2NHSO2-R6; R3-R6 = alkyl, alkoxy, amino; r, s, t, u = 1-5; R2 = R1, alkyl; Z1, Z2 = nonmetallic atoms for forming 5- or 6-membered heterocyclic ring; p, q = 0, 1; L1-L3 = methine group; m = 0-2; X1 = anion; k = number necessary for adjusting charge in the mol. to zero] and the processing method comprises color development with a color developer having a pH >11. The invention provides color images without residual color after developing-processing a high-sensitivity color photog. photosensitive material.
IT 148364-36-7
RL: USES (Uses)
(photog. sensitizing dye, for high-sensitivity photosensitive material)
RN 148364-36-7 CAPLUS
CN Benzothiazolium, 5-chloro-2-[2-[[5-(methoxycarbonyl)-3-(4-sulfobutyl)-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

L7 ANSWER 74 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



IT 148350-04-3P, 5-Chloro-3-methanesulfonylaminocarbonylmethyl-2-methylbenzothiazolium bromide
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, for photog. sensitizing methine dye)
RN 148350-04-3 CAPLUS
CN Benzothiazolium, 5-chloro-2-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)

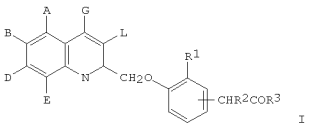


● Br⁻

L7 ANSWER 75 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:508550 CAPLUS
DOCUMENT NUMBER: 121:108550
ORIGINAL REFERENCE NO.: 121:19591a,19594a
TITLE: Preparation of 2-substituted quinolines, and their use
in medicaments
INVENTOR(S): Raddatz, Siegfried; Mohrs, Klaus Helmut; Matzke, Michael; Fruchtmann, Romanis; Hatzelmann, Armin; Kohlsdorfer, Christian; Mueller-Peddinghaus, Reiner; Theisen-Popp, Pia
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: U.S., 26 pp. Cont.-in-part of U.S. Ser. No. 834,734.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

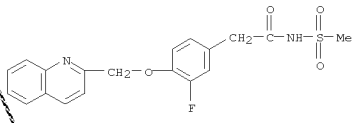
PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 5304563	A	19940419	US 1992-967881		19921028
DE 4105551	A1	19920827	DE 1991-4105551		19910222
DE 4226649	A1	19940217	DE 1992-4226649		19920812
PRIORITY APPLN. INFO.:			DE 1991-4105551	A	19910222
			US 1992-834734	A2	19920212
			DE 1992-4226649	A	19920812

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 121:108550
GI

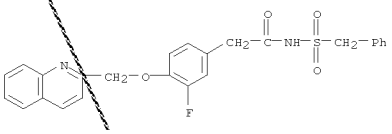


AB Title compds. I (A, B, D, E, G, L = H, HO, halo, NC, HO2C, O2N, F3C, F3CO,
C1-8 alkyl, C1-8 alkoxy, (substituted) C6-8 aryl; R1 = halo, NC, O2N, N3, F3C, F3CO, F3CS, C1-8 alkoxy, C1-8 acyl, (substituted) C1-8 alkyl, (substituted) amino, heterocyclyl, etc.; R2 = C3-12 cycloalky or -alkenyl;

L7 ANSWER 75 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
R3 = (substituted) HO, PhO, R8SO2R7N wherein R7 = H, C1-6 alkyl, R8 = (substituted) C6-10 aryl, (substituted) C1-8 alkyl) and a salt thereof useful in particularly as lipoxygenase inhibitors. I are claimed for treatment of allergies/asthma, bronchitis, emphysema, shock lung, pulmonary hypertension, inflammations/rheumatism, edemas, thromboses, ischemias, cardiac and cerebral infarcts, angina pectoris, arteriosclerosis, in tissue transplantation, psoriasis, and cytoprotection
in the gastrointestinal tract (no data). Me 3-fluoro-5-hydroxyphenylacetate (prepn. given) in DMF was added to NaOH in
MeOH followed by 3-(chloromethyl)quinoline in DMF to give I (A, B, D, E, G, L = H, R1 = F, CHR2COR3 = p-MeOAc). A similar prepd. compd. I (A, B, D, E, L = H = H, R1 = vinyl, CHR2COR3 = p-2-cyclopentylacetic acid) (II) inhibited 5-lipoxygenase with IC50 at 0.56 μmol/L.
IT 145042-99-5P 145043-00-1P 145043-05-6P
145043-26-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparation of lipoxygenase inhibitors)
RN 145042-99-5 CAPLUS
CN Benzeneacetamide, 3-fluoro-N-(methylsulfonyl)-4-(2-quinolinylmethoxy)- (CA INDEX NAME)

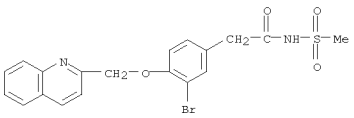


RN 145043-00-1 CAPLUS
CN Benzeneacetamide, 3-fluoro-N-[(phenylmethyl)sulfonyl]-4-(2-quinolinylmethoxy)- (CA INDEX NAME)

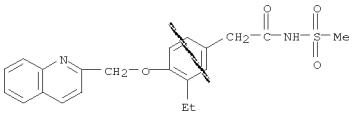


RN 145043-05-6 CAPLUS
CN Benzeneacetamide, 3-bromo-N-(methylsulfonyl)-4-(2-quinolinylmethoxy)- (CA

L7 ANSWER 75 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
INDEX NAME)

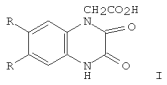


RN 145043-26-1 CAPLUS
CN Benzeneacetamide, 3-ethyl-N-(methylsulfonyl)-4-(2-quinolinylmethoxy)- (CA
INDEX NAME)

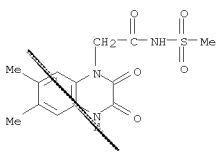


OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 76 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:499050 CAPLUS
DOCUMENT NUMBER: 121:99050
ORIGINAL REFERENCE NO.: 121:17535a,17538a
TITLE: Synthesis and excitatory amino acid pharmacology of some novel quinoxalinediones
AUTHOR(S): Epperson, James R.; Hewawasam, Piyasena; Meanwell, Nicholas A.; Boissard, Christopher G.; Gribkoff, Valentin K.; Post-Munson, Debra
CORPORATE SOURCE: Bristol-Myers Squibb Pharm. Res. Inst., Wallingford, CT, 06492, USA
SOURCE: Bioorganic & Medicinal Chemistry Letters (1993), 3(12), 2801-4
CODEN: BMCLE8; ISSN: 0960-894X
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

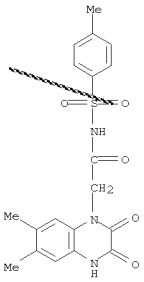


AB The synthesis and amino acid pharmacol. of 12 N-substituted quinoxalinediones is reported. In particular, (I, R = Me, or Cl) show significant antagonism at both the AMPA and glycine-site NMDA receptors. The functional antagonism of I (R = Me) was demonstrated.
IT 156452-61-8P 156452-62-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and AMPA and NMDA receptor antagonist activities of, structure
in relation to)
RN 156452-61-8 CAPLUS
CN 1(2H)-Quinoxalineacetamide, 3,4-dihydro-6,7-dimethyl-N-(methylsulfonyl)-2,3-dioxo- (CA INDEX NAME)



RN 156452-62-9 CAPLUS
CN 1(2H)-Quinoxalineacetamide, 3,4-dihydro-6,7-dimethyl-N-[(4-methylphenyl)sulfonyl]-2,3-dioxo- (CA INDEX NAME)

L7 ANSWER 76 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)

L7 ANSWER 77 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:495797 CAPLUS
DOCUMENT NUMBER: 121:95797
ORIGINAL REFERENCE NO.: 121:16983a,16986a
TITLE: Silver halide photographic material
INVENTOR(S): Ikeda, Hideo; Ikegawa, Akihiko
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 55 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05204082	A	19930813	JP 1992-36928	19920129
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JP 2779725	B2	19980723		
PRIORITY APPLN. INFO.:			JP 1992-36928	19920129
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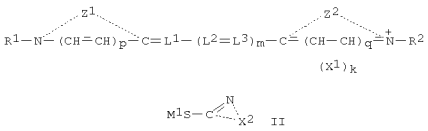
OTHER SOURCE(S):		MARPAT 121:95797		

GI



I

II

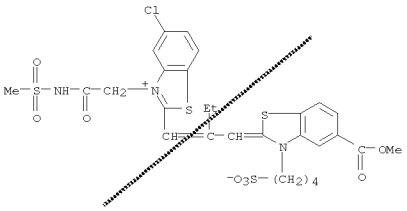
AB In the title material having ≥1 Ag halide emulsion layer(s), the emulsion contains ≥3 mol% of AgI and the layer(s) contains ≥1 methine compd(s). I (R1 = (CH2)rCONHSO2R3, (CH2)sSO2NHCOR4, (CH2)tCONHCOR5, (CH2)uSO2NHSO2R6; R3-6 = alkyl, alkoxy, NH2; r, s, t, u = 1-5; R2 = R1, alkyl; Z1, Z2 = non-metallic atoms forming 5- or 6-membered heterocycles; p, q = 0,1; L1-3 = methine; m = 0-2; X1 = anion; k = number to neutralize charge of I). The above material also contains ≥1 mercapto compd(s). II (M1 = H, group protecting mercapto group cleavable by cation or alkali; X2 = atoms forming 5- or 6-membered heterocycle which may be substituted or fused). The material containing I and II has improved shelf life and forms less residual color.

IT 148364-36-7P
RL: PREP (Preparation)

L7 ANSWER 77 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(prepn. of, photog. emulsion from)

RN 148364-36-7 CAPLUS

CN Benzothiazolium, 5-chloro-2-[2-[[5-(methoxycarbonyl)-3-(4-sulfobutyl)-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



L7 ANSWER 78 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:495788 CAPLUS
DOCUMENT NUMBER: 121:95788
ORIGINAL REFERENCE NO.: 121:16982h,16983a
TITLE: Silver halide color photographic material
INVENTOR(S): Hara, Takeshi; Ikegawa, Akihiko
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 69 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05100373	A	19930423	JP 1991-289544	19911009
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PRIORITY APPLN. INFO.:			JP 1991-289544	19911009
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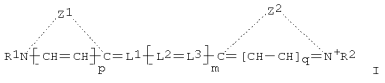
GI



I

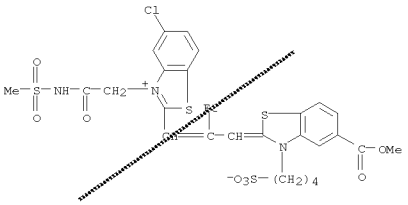
AB In the title photog. material possessing at least each one blue-, green-, and red-sensitive silver halide emulsion layer on a support, at least one constituent layer of said photog. material contains at least one development inhibitor-releasing coupler ALnGm(Time)tX [A = oxidation-reduction parent nucleus or its precursor, which is a group of atoms capable of releasing (Time)tX only when oxidized during photog. development; Time = group capable of releasing a development inhibitor X after it leaves from the oxidized form of a; L = bivalent linkage group; G = acidic group; n, m, t = 0, 1], and at least one of silver halide emulsion layers contains at least one methine sensitizing dye [I; R1 = (CH2)rCONHSO2R3, (CH2)sSO2NHCOR4; R3, R4 = alkyl; r, s = 1-5; R5 = sulfoalkyl; Z1, Z2 = a group of nonmetal atoms required to form a 5- or 6-membered heterocyclic ring; P, q = 0, 1; L1-L3 = methine; m = 0, 1, 2]. This photog. material provides large interimage effect and excellent desilverization during photog. development.

IT 148364-36-7
RL: USES (Uses)
(photog. sensitizing dye, color photog. film containing)

RN 148364-36-7 CAPLUS

CN Benzothiazolium, 5-chloro-2-[2-[[5-(methoxycarbonyl)-3-(4-sulfobutyl)-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

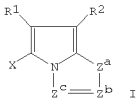
L7 ANSWER 78 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



L7 ANSWER 79 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:446483 CAPLUS
DOCUMENT NUMBER: 121:46483
ORIGINAL REFERENCE NO.: 121:8223a,8226a
TITLE: Silver halide color photographic material
INVENTOR(S): Nagaoka, Satoshi; Yamakawa, Kazuyoshi; Yamamoto, Mitsuru; Suzuki, Makoto; Shimada, Yasuhiro; Nagaoka, Katsuro; Ikeda, Hideo; Hara, Takefumi; Shuto, Sadanobu
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 181 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

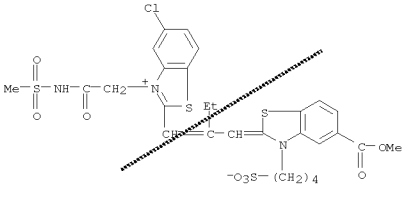
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 566115	A1	19931020	EP 1993-106136	19930415
R: BE, DE, FR, GB, NL				
JP 05289270	A	19931105	JP 1992-119862	19920415
US 5460929	A	19951024	US 1993-45776	19930414
US 5578441	A	19961126	US 1994-315573	19940930
PRIORITY APPLN. INFO.:			JP 1992-119862 A	19920415
			US 1993-45776 A3	19930414

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 121:46483
GI



AB There is disclosed a silver halide color photog. material having ≥1 red-sensitive silver halide emulsion layer, ≥1 green-sensitive silver halide emulsion layer, and ≥1 blue-sensitive silver halide emulsion layer, wherein ≥1 of the emulsion layers contains ≥1 cyan dye-forming coupler represented by the formula I wherein Za represents NH or CHR3, Zb and Zc represent CR4 or N, R1-3 represent an electron-attracting group wherein the Hammett substituent constant σp value is 0.20 or more, provided that the sum of the σp value of R1

L7 ANSWER 79 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
and the σp value of R2 is 0.65 or more, R4 represents a hydrogen atom or a substituent, if there are two groups R4 in the formula, they may be the same or different, and X represents a hydrogen atom or a group capable of being released upon a coupling reaction with the oxidized product of an arom. primary amine color-developing agent, provided that R1-4 or X may be a divalent group to form a homopolymer or a copolymer by bonding with a dimer or higher polymer or polymer chain and ≥1 sensitizing dye contg. a sulfonamido group.
IT 148364-36-7
RL: USES (Uses)
(silver halide color photog. materials containing pyrrolopyrazole cyan photog couplers and)
RN 148364-36-7 CAPLUS
CN Benzothiazolium, 5-chloro-2-[2-[[5-(methoxycarbonyl)-3-(4-sulfobutyl)-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

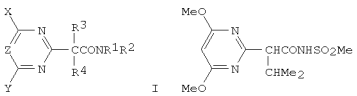


OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L7 ANSWER 80 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:435621 CAPLUS
DOCUMENT NUMBER: 121:35621
ORIGINAL REFERENCE NO.: 121:6587a,6590a
TITLE: Preparation of triazinyl- and pyrimidinylalkanoic acid amide derivatives as herbicides
INVENTOR(S): Masuda, Katsumi; Toyabe, Keiji; Yoshimura, Takumi; Yoshida, Ryo
PATENT ASSIGNEE(S): Kumiai Chemical Industry Co, Japan; Ihara Chemical Ind Co
SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

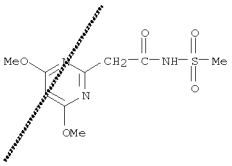
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06041090	A	19940215	JP 1991-337875	19911128
PRIORITY APPLN. INFO.:			JP 1991-337875	19911128

OTHER SOURCE(S): MARPAT 121:35621
GI



AB Triazinyl- and pyrimidinylalkanamides [I; R1 = H, OH, (un)substituted alkyl, alkenyl, alkynyl, alkoxy, benzyloxy, alkenyloxy, alkynyloxy; R2 = SO2R5, OH, alkoxy, benzyloxy, alkenyloxy, cyano, (un)substituted Ph, NH2, alkylsulfonylamino; R5 = (un)substituted alkyl, alkenyl, cycloalkyl, (di)alkylamino, 1-pyrrolidinyl, anilino; R3 = H, (un)substituted alkyl, (halo)alkenyl, alkynyl, (alkyl)cycloalkyl, cycloalkenyl, (un)substituted Ph, tetrahydrothienyl, tetrahydrofuryl; R4 = H, alkyl; X, Y = OH, halo, (halo)alkyl, alkoxyalkyl, alkoxy, (alkyl)phenoxy, haloalkoxy, alkenyloxy, alkynyloxy, alkylthio, PhS, NH2, (di)alkylamino, pyrrolidino; Z = CH, N], useful as herbicides for a rice paddy, a plowed field, and nonagricultural land are prepared Thus, di-Et 2-isopropylmalonate was treated with NaH in DMF at 60° for 30 min and condensed with 4,6-dimethoxy-2-fluoropyrimidine to give di-Et 2-(4,6-dimethoxypyrimidin-2-yl)-2-isopropylmalonate which was refluxed with NaOH in aqueous MeOH for 6 h and acidified with dilute HCl to give 2-(4,6-dimethoxypyrimidin-2-yl)-3-methylbutyric acid. The latter compound was condensed with carbonyl diimidazole in THF to give 86.7% N-[2-(4,6-dimethoxypyrimidin-2-yl)-3-methylbutyryl]imidazole which was

L7 ANSWER 80 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
amidated with MeSO2NH2 in DMF contg. NaH to give 76.8% title compd. (II). II and other 21 I at 25 g/10 are in preemergence soil-application controlled ≥90% or 70-89% 7 weeds including Echinochloa crus-galli, Amaranthus retroflexus, and Chenopodium album. A total of I were prepd.
IT 140704-78-5P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as herbicide)
RN 140704-78-5 CAPLUS
CN 2-Pyrimidineacetamide, 4,6-dimethoxy-N-(methylsulfonyl)- (CA INDEX NAME)



L7 ANSWER 81 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:334737 CAPLUS
DOCUMENT NUMBER: 120:334737
ORIGINAL REFERENCE NO.: 120:58649a,58652a
TITLE: Direct positive silver halide photographic material containing sensitizing dyes
INVENTOR(S): Kato, Seiichi; Ikegawa, Akihiko; Kuramitsu, Masayuki
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 35 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05127292	A	19930525	JP 1991-313066	19911101

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PRIORITY APPLN. INFO.: JP 1991-313066 19911101
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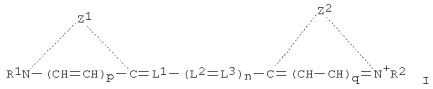
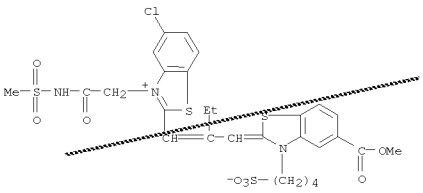


AB In the title photog. material having on its support ≥1 photosensitive emulsion layer(s) containing unprefogged internal latent image-type Ag halide grains, ≥1 of sensitizing dye I [R1 = (CH2)rCONHSO2R3, (CH2)sSO2NHCOR4 (R3, R4 = alkyl; r, s = 1-5); R2 = sulfoalkyl; Z1, Z2 = non-metallic atoms required to form 5-6-membered heterocycle; p, q = 0, 1; L1-3 = methine; m = 0-2] is contained. The photog. material shows high-stability and superior whiteness without color
residue after processing.
IT 148364-36-7
RL: USES (Uses)
(sensitizing dye, direct pos. photog. material using)
RN 148364-36-7 CAPLUS
CN Benzothiazolium, 5-chloro-2-[2-[[5-(methoxycarbonyl)-3-(4-sulfobutyl)-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

L7 ANSWER 81 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



L7 ANSWER 82 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:298483 CAPLUS
DOCUMENT NUMBER: 120:298483
ORIGINAL REFERENCE NO.: 120:52605a,52608a
TITLE: Substituted indole-, indene-, pyranoindole- and tetrahydrocarbazole-alkanoic acid derivatives as inhibitors of phospholipase A2 and lipoxygenase
INVENTOR(S): Musser, John H.; Kreft, Anthony F., III; Failli, Amedeo A.; Demerson, Christopher A.; Shah, Uresh S.; Nelson, James A.
PATENT ASSIGNEE(S): American Home Products Corp., USA
SOURCE: U.S., 32 pp. Cont.-in-part of U.S. Ser. No. 596,134, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5229516	A	19930720	US 1992-911434	19920710

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CA 2070422 A1 19910428 CA 1990-2070422 19901027
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CA 2090042 A1 19910428 CA 1990-2090042 19901027
<--
HU 63407 A2 19930830 HU 1992-1383 19901027
<--
US 5420289 A 19950530 US 1993-29199 19930310
<--
WO 9401407 A2 19940120 WO 1993-US6441 19930707
<--
WO 9401407 A3 19940303
W: AU, BB, BG, BR, BY, CA, CZ, FI, HU, JP, KP, KR, KZ, LK, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, VN
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
AU 9346694 A 19940131 AU 1993-46694 19930707
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PRIORITY APPLN. INFO.: US 1989-428260 B2 19891027
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US 1990-596134 B2 19901011
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CA 1990-2070422 A3 19901027
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US 1992-911434 A2 19920710
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WO 1993-US6441 A 19930707
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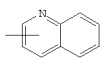
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 120:298483
GI

L7 ANSWER 82 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

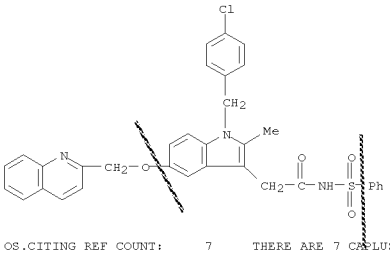
Q= 

AB The title compds. A(CH2)nOB [A = Q; B = (un)substituted indenonyl, (un)substituted indolyl, etc.; n = 1-2], useful as antiinflammatory agents which possess leukotriene antagonistic activity, are prepared Thus, 3-[(4-chlorophenyl)methylene]-[2-methyl-6-(2-quinolinylmethyoxy)]-3H-indene-1-acetic acid (Z configuration), prepared from 4-methoxybenzaldehyde in 7 steps, demonstrated 81% inhibition of PGE2 at 10 μM.

IT 135872-84-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and lipoxygenase and phospholipase A2 inhibitory activity of)

RN 135872-84-3 CAPLUS

CN 1H-Indole-3-acetamide, 1-[(4-chlorophenyl)methyl]-2-methyl-N-(phenylsulfonyl)-5-(2-quinolinylmethoxy)- (CA INDEX NAME)



OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

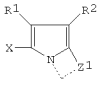
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 83 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1994:231835 CAPLUS
DOCUMENT NUMBER: 120:231835
ORIGINAL REFERENCE NO.: 120:40837a,40840a
TITLE: Silver halide color photographic material
INVENTOR(S): Hara, Takefumi; Yamakawa, Kazuyoshi; Shuto, Sadanobu; Yamamoto, Mitsuru; Suzuki, Makoto; Shimada, Yasuhiro; Nagaoka, Katsuro; Nagaoka, Satoshi; Shibahara, Yoshihiko; Ikeda, Hideo
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 234 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 563985	A1	19931006	EP 1993-105497	19930402
R: BE, DE, FR, GB, NL				
JP 05281681	A	19931029	JP 1992-109131	19920403
JP 2777949	B2	19980723		
US 5578436	A	19961126	US 1995-453398	19950530
US 5691125	A	19971125	US 1996-665897	19960619
PRIORITY APPLN. INFO.:			JP 1992-109131 A	19920403
			US 1993-43027 B3	19930405
			US 1995-453398 A3	19950530

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 120:231835
GI



AB A multicolor photog. material comprises a cyan dye-forming coupler I [R1 = H, substituent; R2 = substituent; X = H, a group capable of being released

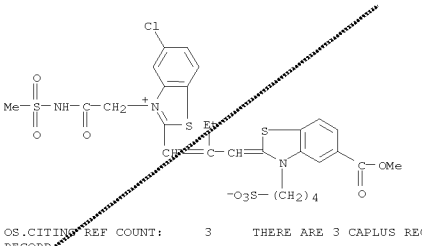
L7 ANSWER 83 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

upon a coupling reaction with the oxidized product of a color-developing agent; Z1 = group of nonmetallic atoms required for forming a N-contg. 6-membered heterocyclic ring, which contains at least one group capable of being dissocd.], and (a) a monodisperse Ag halide emulsion, (b) non-photosensitive Ag halide emulsion wherein the inside or the surface of grains is fogged, (c) a colloidal Ag, (d) neg.-type internal latent image-type Ag halide grains chem. sensitized to a defined depth from the surface, (e) a sensitizing dye contg. a sulfonamide group, (f) three sepd. layers of high, medium, and low sensitivities, (g) two sepd. layers each having different content of I, (h) grains each having a defined spectral sensitivity distribution and a DIR-hydroquinone, or (i) a DIR-hydroquinone. The novel cyan dye-forming coupler-contg. photog. material is excellent in sensitivity/graininess ratio and color reprodn.

IT 148364-36-7
RL: TEM (Technical or engineered material use); USES (Uses)
(photog. sensitizer)

RN 148364-36-7 CAPLUS

CN Benzothiazolium, 5-chloro-2-[2-[[5-(methoxycarbonyl)-3-(4-sulfobutyl)-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



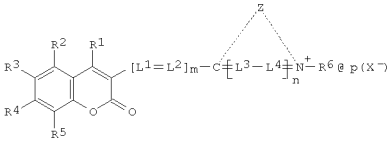
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L7 ANSWER 84 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1994:148785 CAPLUS
DOCUMENT NUMBER: 120:148785
ORIGINAL REFERENCE NO.: 120:25977a,25980a
TITLE: Silver halide photographic material
INVENTOR(S): Ohno, Shigeru
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: U.S., 10 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5223382	A	19930629	US 1992-983701	19921201
JP 05150401	A	19930618	JP 1991-318201	19911202
JP 2648992	B2	19970903		
PRIORITY APPLN. INFO.:			JP 1991-318201 A	19911202

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
GI



AB The title material comprises ≥1 hydrophilic colloidal layer containing a dye I [Z = atoms necessary to form 5- or 6-membered N-containing heterocyclyl ring; R1-R5 = H, monovalent group; R3-R4 and/or R4-R5 may combine to form ring; R6 = alkyl aryl alkenyl; L1-L4 = methine group; X- = anion; m = 1-2; n = 0, 1; p = 0, 0.5, 1;]. The dye can be quickly decolored during development and can provide images with excellent sharpness and less residual color.

IT 153411-13-3 153411-15-5
RL: USES (Uses)
(photog. films containing)

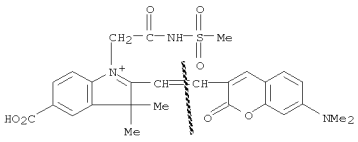
RN 153411-13-3 CAPLUS

CN 3H-Indolium, 5-carboxy-2-[2-[7-(dimethylamino)-2-oxo-2H-1-benzopyran-3-yl]ethenyl]-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, hexafluorophosphate(1-) (1:1) (CA INDEX NAME)

CM 1

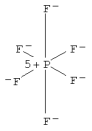
CRN 153411-12-2

L7 ANSWER 84 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CMF C27 H28 N3 O7 S



CM 2

CRN 16919-18-9
CMF F6 P
CCI CCS

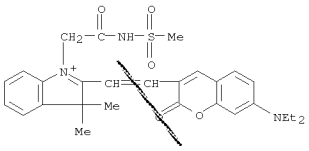


RN 153411-15-5 CAPLUS
CN 3H-Indolium, 2-[2-[7-(diethylamino)-2-oxo-2H-1-benzopyran-3-yl]ethenyl]-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, 1,1,1-trifluoromethanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 153411-14-4
CMF C28 H32 N3 O5 S

L7 ANSWER 84 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



CM 2

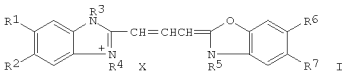
CRN 37181-39-8
CMF C F3 O3 S

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 85 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:65779 CAPLUS
DOCUMENT NUMBER: 120:65779
ORIGINAL REFERENCE NO.: 120:11701a,11704a
TITLE: Green sensitizing dyes for variable contrast photographic elements
INVENTOR(S): Price, Harry J.; Gilman, Paul B.; Dobles, Thomas R.; Knapp, Linda J.
PATENT ASSIGNEE(S): Eastman Kodak Co., USA
SOURCE: Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

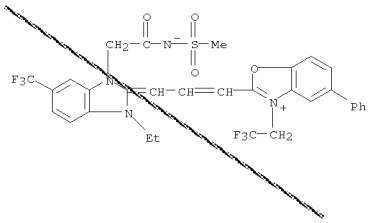
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 536771	A1	19930414	EP 1992-117281	19921009
EP 536771	B1	19990113		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
US 5219723	A	19930615	US 1991-774440	19911010
JP 05216153	A	19930827	JP 1992-271982	19921009
PRIORITY APPLN. INFO.:			US 1991-774440 A	19911010

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 120:65779
GI



AB A variable-contrast photog. material, with reduced photosensitivity at wavelengths longer than 570 nm, thereby enhancing safe light tolerance, while still maintaining good spectral sensitivity at wavelengths in the green region, comprises a photosensitive Ag halide emulsion layer sensitized with a green-sensitivity benzimidazolooxacarbocyanine dye of the general formula I (R1,R2,R6,R7 = H, halogen, OH, alkyl, alkenyl, alkoxy, alkylamino, aryl, alkylthio, aryloxy, arylamino, or arylthio; R3, R4 = alkyl; R5 = a substituent containing an electron-withdrawing group; X = a counterion as needed to balance the charge of the dye mol.).
IT 152085-93-3
RL: USES (Uses)
(green, benzentosylyloxocarbocyanide dyes as, for variable-contrast photog. materials with good safe light property)
RN 152085-93-3 CAPLUS
CN Benzoxazolium, 2-[3-[1-ethyl-1,3-dihydro-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-5-(trifluoromethyl)-2H-benzimidazol-2-ylidene]-1-propen-1-yl]-5-

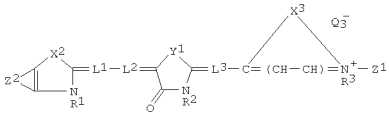
L7 ANSWER 85 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
phenyl-3-(2,2,2-trifluoroethyl)-, inner salt (CA INDEX NAME)



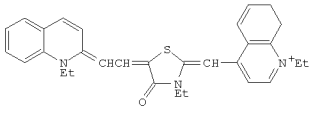
L7 ANSWER 86 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:568 CAPLUS
DOCUMENT NUMBER: 120:568
ORIGINAL REFERENCE NO.: 120:135a,138a
TITLE: Rhodacyanine compounds as neoplasm inhibitors
INVENTOR(S): Shishido, Tadao; Chen, Lan Bo
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan; Dana-Farber Cancer Institute
SOURCE: Jpn. Kokai Tokkyo Koho, 174 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05117148	A	19930514	JP 1992-104724	19920423
US 5861424	A	19990119	US 1995-478582	19950607
PRIORITY APPLN. INFO.:			US 1991-692347 A	19910426
			US 1992-974480 B1	19921112

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 120:568
GI



I

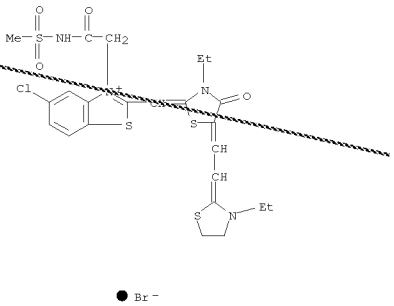


II

AB Rhodacyanine compds. (I) [X2, X3, Y1 = O, S or Se; Z1 = atom for forming rings; Z2 = atom for forming (un)substituted naphthaline, anthracene, phenanthrene; R1,R3 = (un)substituted alkyl; R2 = (un)substituted alkyl, aryl, or heterocyclic; L1-3 = (un)substituted methylene; Q- = pharmaceutically acceptable anion; n = 0 or 1; l = 1 or 2] are neoplasm

L7 ANSWER 86 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
inhibitors. II was prepd. by treating

5-[(1-ethyl-2(1H)-1,2-dihydroquinolinylidene)ethylidene]-2-methylmercapto-4-thiazolone etho-p-toluenesulfonate with 1-ethyl-4-methylquinolinium p-toluenesulfonate. II inhibited the growth of human colon cancer cell line CX-1 in cultures. The IC50 value was o.1 μg/mL.
IT 149258-43-5
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antitumor activity of)
RN 149258-43-5 CAPLUS
CN Benzothiazolium, 5-chloro-2-[[3-ethyl-5-[2-(3-ethyl-2-thiazolidinylidene)ethylidene]-4-oxo-2-thiazolidinylidene]methyl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)

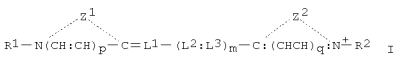


OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L7 ANSWER 87 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:591854 CAPLUS
DOCUMENT NUMBER: 119:191854
ORIGINAL REFERENCE NO.: 119:34037a,34040a
TITLE: Silver halide photographic light-sensitive material
INVENTOR(S): Nagaoki, Katsurou; Ikegawa, Akihiro; Kuramitsu, Masayuki
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 137 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 534283	A2	19930331	EP 1992-115755	19920915
EP 534283	A3	19930630		
EP 534283	B1	19971217		
R: DE, FR, GB				
JP 05080447	A	19930402	JP 1991-243128	19910924
JP 2794232	B2	19980903		
JP 05173276	A	19930713	JP 1991-310220	19911030
JP 05127291	A	19930525	JP 1991-311382	19911031
JP 05127293	A	19930525	JP 1991-318507	19911106
US 5290676	A	19940301	US 1992-944314	19920914
PRIORITY APPLN. INFO.:			JP 1991-243128 A	19910924
			JP 1991-310220 A	19911030
			JP 1991-311382 A	19911031
			JP 1991-318507 A	19911106

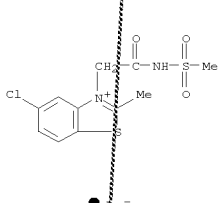
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 119:191854
GI



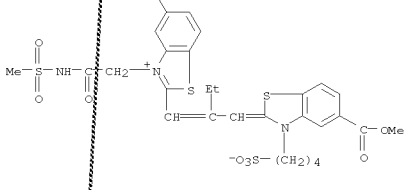
I

AB The title material contains ≥1 Ag halide emulsion spectrally sensitized with the methine dye I [R = (CH)rCONHSOR or (CH)sSONHCOR where R and R are alkyl and r and s = 1-5; R = sulfoalkyl; Z, Z = nonmetal atoms
required to form ring; p, q = 0, 1; L-L =methine; m = 1-2] 1 of which is added at 50 at any step from the step of preparing the emulsion to the step

L7 ANSWER 87 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
of coating. The material has excellent sensitivity/graininess ratio, storage stability, and color stability after development.
IT 148350-04-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, photog. sensitizer from)
RN 148350-04-3 CAPLUS
CN Benzothiazolium, 5-chloro-2-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)

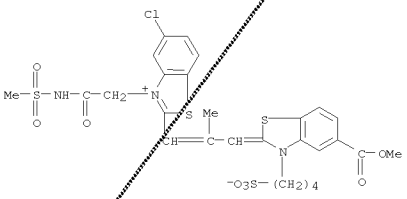


IT 148364-36-7P 149702-97-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and use of, as photog. sensitizer)
RN 148364-36-7 CAPLUS
CN Benzothiazolium, 5-chloro-2-[2-[[5-(methoxycarbonyl)-3-(4-sulfobutyl)-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



RN 149702-97-6 CAPLUS
CN Benzothiazolium, 5-chloro-2-[3-[5-(methoxycarbonyl)-3-(4-sulfobutyl)-2(3H)-benzothiazolylidene]-2-methyl-1-propen-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

L7 ANSWER 87 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

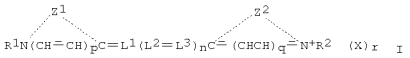


OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L7 ANSWER 88 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:482794 CAPLUS
DOCUMENT NUMBER: 119:82794
ORIGINAL REFERENCE NO.: 119:14667a,14670a
TITLE: Silver halide color photographic material
INVENTOR(S): Ikegawa, Akihiko; Kuramitsu, Masayuki; Okazaki, Masaki
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 130 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

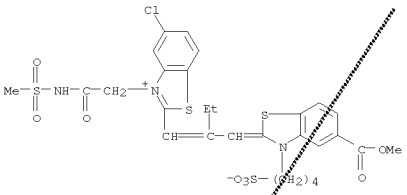
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 530511	A1	19930310	EP 1992-113135	19920731
EP 530511	B1	19980603		
R: DE, GB, NL				
JP 05093978	A	19930416	JP 1992-23324	19920114
JP 2829452	B2	19981125		
JP 05188516	A	19930730	JP 1992-23422	19920114
JP 2779722	B2	19980723		
US 5422238	A	19950606	US 1993-165540	19931213

PRIORITY APPLN. INFO.: JP 1991-216472 A 19910802
JP 1992-23324 A 19920114
JP 1992-23422 A 19920114
US 1992-922221 B1 19920731
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 119:82794
GI

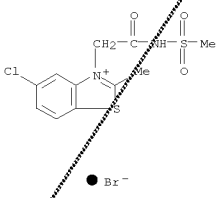


AB A Ag halide color photog. material showing improved sensitivity and reduced residual color formation during development contains ≥1 methine compound represented by the formula I [R1 = (CH2)rCONHSO2R3, (CH2)sSO2NHCOR4, (CH2)tCONHCOR5, or (CH2)uSO2NHSO2R6 where R3-6 = alkyl, alkoxy, or amino; r, s, t, u = an integer of 1-5; R2 = same as R1 or alkyl; Z1, Z2 = a nonmetallic atomic group required to form a 5- or

L7 ANSWER 88 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
6-membered heterocyclic group; p,q = 0 or 1; L1-3 = a methine group; m = 0, 1, or 2; X = an anion; k = an integer required to adjust the charge in the mol. to 0].
IT 148364-36-7
RL: TEM (Technical or engineered material use); USES (Uses)
(photog. sensitizer)
RN 148364-36-7 CAPLUS
CN Benzothiazolium, 5-chloro-2-[2-[[5-(methoxycarbonyl)-3-(4-sulfobutyl)-2(3H)-benzothiazolylidene]methyl]-1-buten-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



IT 148350-04-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparing photog. sensitizer)
RN 148350-04-3 CAPLUS
CN Benzothiazolium, 5-chloro-2-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)

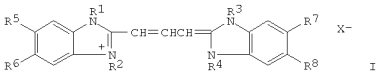


OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L7 ANSWER 89 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1993:112880 CAPLUS
DOCUMENT NUMBER: 118:112880
ORIGINAL REFERENCE NO.: 118:19509a,19512a
TITLE: Benzimidazolocarbocyanine photographic sensitivity dye
INVENTOR(S): Anderson, Richard B.; Dickerson, Robert E.; Link, Steven G.; Macon, Fred M.; Weber, Wayne W. Ii
PATENT ASSIGNEE(S): Eastman Kodak Co., USA
SOURCE: Eur. Pat. Appl., 14 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 506077	A1	19920930	EP 1992-105300	19920327
EP 506077	B1	19970604		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
US 5210014	A	19930511	US 1991-676913	19910328
CA 2062570	A1	19920929	CA 1992-2062570	19920310
JP 05088293	A	19930409	JP 1992-70815	19920327
AT 154142	T	19970615	AT 1992-105300	19920327

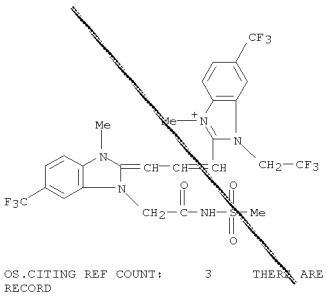
PRIORITY APPLN. INFO.: US 1991-676913 A 19910328
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 118:112880
GI



AB A benzimidazolocarbocyanine photog. sensitizing dye that aggregates and sensitizes efficiently in the 540-555-nm spectral region and leaves a very low level of residual dye stains in photog. materials after processing is represented by the general formula I [R1, R3 = Me or Et, with ≥1 of R1 and R3 being Me; R2, R4 = (substituted) C1-6 alkyl, with R2 and R4 being not both Me; R5-8 H, Me, methylthio, or F-substituted Me or methylthio, with ≥1 of R5 and R6 and ≥1 of R7 and R8 being not H; X- = anion as needed to balance the charge of the dye mol.].
IT 145300-28-3
RL: USES (Uses)
(mid-green photog. spectral sensitizer)
RN 145300-28-3 CAPLUS
CN 1H-Benzimidazolium, 2-[3-[1,3-dihydro-1-methyl-3-[2-

L7 ANSWER 89 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

[(methylsulfonyl)amino]-2-oxoethyl]-5-(trifluoromethyl)-2H-benzimidazol-2-ylidene]-1-propen-1-yl]-1-methyl-3-(2,2,2-trifluoroethyl)-5-(trifluoromethyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

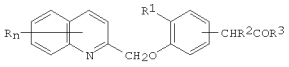
L7 ANSWER 90 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1993:38772 CAPLUS
DOCUMENT NUMBER: 118:38772
ORIGINAL REFERENCE NO.: 118:7063a,7066a
TITLE: Preparation of 2-cycloalkyl-2-[(quinolylmethoxy)phenyl] acetates as lipoxygenase inhibitors
INVENTOR(S): Raddatz, Siegfried; Mohrs, Klaus Helmut; Matzke, Michael; Fruchtmann, Romanis; Hatzelmann, Armin; Kohlsdorfer, Christian; Mueller-Peddinghaus, Reiner; Theisen-Popp, Pia
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: Eur. Pat. Appl., 52 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 499926	A1	19920826	EP 1992-102156	19920210
EP 499926	B1	19960911		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, PT, SE				
DE 4105551	A1	19920827	DE 1991-4105551	19910222
AU 9210542	A	19920827	AU 1992-10542	19920129
AU 641585	B2	19930923		
AT 142623	T	19960915	AT 1992-102156	19920210
ES 2091958	T3	19961116	ES 1992-102156	19920210
JP 05092957	A	19930416	JP 1992-69073	19920218
IL 101009	A	19960804	IL 1992-101009	19920219
PL 170726	B1	19970131	PL 1992-293534	19920219
PL 171026	B1	19970228	PL 1992-314698	19920219
FI 9200732	A	19920823	FI 1992-732	19920220
ZA 9201268	A	19921125	ZA 1992-1268	19920221
RU 2077532	C1	19970420	RU 1992-5010907	19920221
CZ 282723	B6	19970917	CZ 1992-514	19920221

PRIORITY APPLN. INFO.: DE 1991-4105551 A 19910222
OTHER SOURCE(S): MARPAT 118:38772
GI

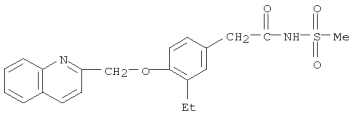
L7 ANSWER 90 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



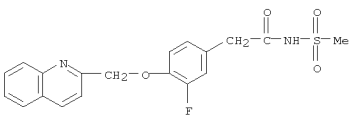
I

AB Title compds. (I; R = H, OH, halo, alkyl, aryl, etc.; R1 = halo, OH, alkyl, aryl, etc.; R2 = cycloalkyl, -alkenyl; R3 = OH, alkoxy, OPh, arylsulfonylamino, etc.; n = 1-6) were prepared Thus, 3,4-F(HO)C6H3CH2CO2H was esterified and the product condensed with 2-chloromethylquinoline to give, after alkylation with cyclopentyl bromide, 3,4-R1(R4O)C6H3CHR2CO2Me (R2 = cyclopentyl, R4 = 2-quinolylmethyl)(II; R1 = F). II (R1 = CH:CH2) had IC50 of 0.56 μM for inhibition of 5-lipoxygenase in vitro.

IT 145043-26-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation and reaction of, in preparation of lipoxygenase inhibitors)
RN 145043-26-1 CAPLUS
CN Benzeneacetamide, 3-ethyl-N-(methylsulfonyl)-4-(2-quinolinylmethoxy)- (CA INDEX NAME)

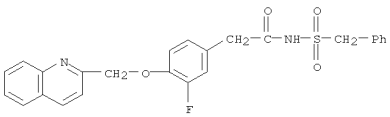


IT 145042-99-5P 145043-00-1P 145043-05-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparation of lipoxygenase inhibitors)
RN 145042-99-5 CAPLUS
CN Benzeneacetamide, 3-fluoro-N-(methylsulfonyl)-4-(2-quinolinylmethoxy)- (CA INDEX NAME)

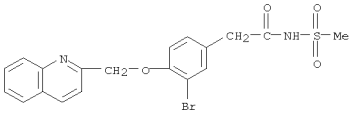


RN 145043-00-1 CAPLUS

L7 ANSWER 90 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
CN Benzeneacetamide, 3-fluoro-N-[(phenylmethyl)sulfonyl]-4-(2-quinolinylmethoxy)- (CA INDEX NAME)



RN 145043-05-6 CAPLUS
CN Benzeneacetamide, 3-bromo-N-(methylsulfonyl)-4-(2-quinolinylmethoxy)- (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L7 ANSWER 91 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1992:402825 CAPLUS
DOCUMENT NUMBER: 117:2825
ORIGINAL REFERENCE NO.: 117:591a,594a
TITLE: Preparation of N-sulfonamides as herbicides
INVENTOR(S): Toyabe, Keiji; Yoshimura, Takumi; Masuda, Katsumi; Yoshida, Ryo
PATENT ASSIGNEE(S): Kumiai Kagaku Kogyo K. K., Japan; Ihara Chemical Kogyo K. K.
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04054168	A	19920221	JP 1990-166271	19900625

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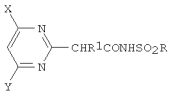
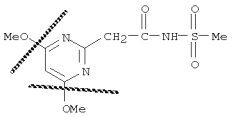
PRIORITY APPLN. INFO.: JP 1990-166271 19900625
<--
OTHER SOURCE(S): MARPAT 117:2825
GI



I

AB Herbicides contain N-sulfonamides I [R = (halo)alkyl, (un)substituted Ph; R1 = H, alkyl, (halo)alkenyl, cycloalkyl, cycloalkenyl, cycloalkylalkyl, (un)substituted Ph; X, Y = alkyl, (halo)alkoxy, halo] or their salts as active ingredients. MeSO2NH2 was treated with NaH in DMF at room temperature for 1 h, followed by treatment with 2-(4,6-dimethoxy-2-pyrimidinyl)-3-methylbutyrylimidazole (preparation given) at room temperature for 1 h to give 76.8% I (R = Me, R1 = Me2CH, X = Y = OMe), which, at 100 g/10 are, showed almost complete control of Echinochloa crus-galli oryzicola, Monochoria vaginalis, and Scirpus juncoides. Formulation examples are given.
IT 140704-78-5P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as herbicide)

L7 ANSWER 91 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
RN 140704-78-5 CAPLUS
CN 2-Pyrimidineacetamide, 4,6-dimethoxy-N-(methylsulfonyl)- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

L7 ANSWER 92 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1992:255642 CAPLUS
DOCUMENT NUMBER: 116:255642
ORIGINAL REFERENCE NO.: 116:43354h,43355a
TITLE: Preparation of 2-(4,6-dimethoxypyrimidin-2-yl)-N-(methylsulfonyl)alkanamides and related triazinyl compounds as herbicides
INVENTOR(S): Jones, Graham Peter
PATENT ASSIGNEE(S): Schering Agrochemicals Ltd., UK
SOURCE: PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9201677	A1	19920206	WO 1991-GB1152	19910712

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W: AU, BR, CA, CS, FI, HU, JP, KR, PL, SU, US
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE

AU 9180996	A	19920218	AU 1991-80996	19910712

<--

EP 539427	A1	19930505	EP 1991-912894	19910712

<--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

US 5317005	A	19940531	US 1993-966169	19930119

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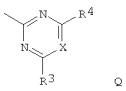
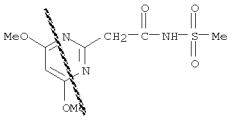
PRIORITY APPLN. INFO.: GB 1990-15916 A 19900719
<--
WO 1991-GB1152 A 19910712
<--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 116:255642
GI



Q

AB ACR1R2CONHSO2R [I; A = pyrimidinyl or triazinyl residue Q; R = amino, (un)substituted alkyl; R1 = (un)substituted (cyclo)alkyl, -Ph, -heterocyclyl; R2 = H, halo, alkyl; R3, R4 = H, alkyl, alkoxy, NH2, (di)alkylamino, halo; X = CH, N] and their salts, were prepared, e.g., by condensation reaction of pyrimidines or triazines QZ (Z = leaving group) with acetamides R1R2CHCONHSO2R. Thus, 20 mL of 2.5 M n-BuLi in hexane was added at -70° under N to a stirred solution of 4.67 g N-(methylsulfonyl)-2-(2-thienyl)acetamide in THF, the mixture was stirred 2 h at room temperature, treated by 5.45 g

L7 ANSWER 92 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
4,6-dimethoxy-2-methylsulfonylpyrimidine, and stirred overnight at room temp. to give 1,8 g title compd. (I; A = 4,6-dimethoxypyrimidinyl, R = Me, R1 = 2-thienyl, R2 = H). The latter at 0.25 kg/ha preemergence gave 90-100% control of Veronica persica and 70-89% control of Stellaria media, Galium aparine, and Polygonum lapathifolium. Approx. 32 I were prepd.
IT 140704-78-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and alkylation of, in preparation of herbicide)
RN 140704-78-5 CAPLUS
CN 2-Pyrimidineacetamide, 4,6-dimethoxy-N-(methylsulfonyl)- (CA INDEX NAME)



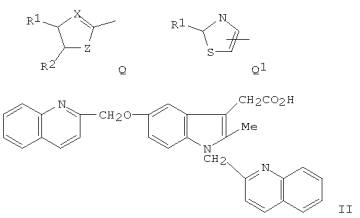
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 93 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1991:535935 CAPLUS
DOCUMENT NUMBER: 115:135935
ORIGINAL REFERENCE NO.: 115:23307a,23310a
TITLE: Preparation of indole-, indene-, pyranoindole- and tetrahydrocarbazolealkanoic acid derivatives as inhibitors of phospholipase A2 and lipoxygenase
INVENTOR(S): Musser, John Henry; Kreft, Anthony Frank, III; Failli, Amedeo Arturo; Demerson, Christopher Alexander; Shah, Uresh Shantilal; Nelson, James Albert
PATENT ASSIGNEE(S): American Home Products Corp., USA
SOURCE: PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9106537	A2	19910516	WO 1990-US6251	19901027
WO 9106537	A3	19911017		
W: AU, BR, CA, FI, HU, JP, KR, SU				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
CA 2070422	A1	19910428	CA 1990-2070422	19901027
CA 2090042	A1	19910428	CA 1990-2090042	19901027
AU 9177404	A	19910531	AU 1991-77404	19901027
AU 643996	B2	19931202		
EP 502106	A1	19920909	EP 1991-900547	19901027
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
BR 9007790	A	19920915	BR 1990-7790	19901027
JP 05502222	T	19930422	JP 1991-500787	19901027
HU 63407	A2	19930830	HU 1992-1383	19901027
FI 9201865	A	19920424	FI 1992-1865	19920424

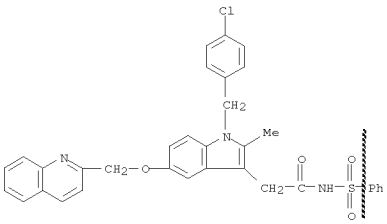
PRIORITY APPLN. INFO.: US 1989-428260 A 19891027
US 1990-596134 A 19901011
CA 1990-2070422 A3 19901027
WO 1990-US6251 A 19901027
OTHER SOURCE(S): MARPAT 115:135935
GI

L7 ANSWER 93 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



AB A(CH2)nOB [I; A = C4-8 alkyl, PhOCH2CH2, PhOC6H4, Q, Q1; R1 = H, alkyl, Ph, C6H4CF3; R2 = H, alkyl; R1R2 = benzene; X = N, R3C, R3 = H, alkyl; Z = R3C:CR3, R3C:N, N:CR3, NR3, O, S; n = 1, 2; B = substituted indanyl, substituted carbazolyl, substituted pyranoindolyl, etc.] and a salt thereof, are prepared I are useful as antiinflammatory agents and possess leukotriene antagonistic activity. To a stirred suspension of NaH in DMF at 0° was added 5-hydroxy-2-methyl-1H-indole-3-acetic acid followed after 1 h by 2-(chloromethyl)quinoline. The reaction mixture allowed to warm at room temperature with stirring overnight and the pH adjusted to 5 with HCl to give the indoleacetic acid (II) which at 10 μM in vitro gave 47% inhibition of phospholipase A2 (PLA2) from semi-purified human platelet extract, and 30% of PLA2 from purified human synovialfluid.
IT 135872-84-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as lipoxygenase and phospholipase A2 inhibitor)
RN 135872-84-3 CAPLUS
CN 1H-Indole-3-acetamide, 1-[(4-chlorophenyl)methyl]-2-methyl-N-(phenylsulfonyl)-5-(2-quinolinylmethoxy)- (CA INDEX NAME)

L7 ANSWER 93 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



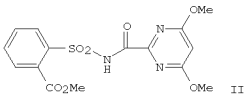
OS.CITING REF COUNT: 22 THERE ARE 22 CAPLUS RECORDS THAT CITE THIS RECORD (23 CITINGS)
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 94 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1990:459231 CAPLUS
DOCUMENT NUMBER: 113:59231
ORIGINAL REFERENCE NO.: 113:10030h,10031a
TITLE: Azinylacylsulfonamides as herbicides and plant growth regulators
INVENTOR(S): Ort, Oswald; Willms, Lothar; Bauer, Klaus; Bieringer, Hermann; Schulz, Arno
PATENT ASSIGNEE(S): Hoechst A.-G., Germany
SOURCE: Ger. Offen., 121 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3826230	A1	19900208	DE 1988-3826230	19880802
EP 353640	A2	19900207	EP 1989-113916	19890728
EP 353640	A3	19910508		
EP 353640	B1	19950412		
EP 353640	B2	20031015		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
ES 2070870	T3	19950616	ES 1989-113916	19890728
DD 283915	A5	19901031	DD 1989-331307	19890731
US 5053072	A	19911001	US 1989-387531	19890731
IL 91164	A	19941128	IL 1989-91164	19890731
DK 8903773	A	19900203	DK 1989-3773	19890801
AU 8939144	A	19900208	AU 1989-39144	19890801
AU 636299	B2	19930429		
ZA 8905852	A	19900425	ZA 1989-5852	19890801
JP 02282371	A	19901119	JP 1989-198114	19890801
JP 3117137	B2	20001211		
HU 55001	A2	19910429	HU 1989-3924	19890801
BR 8903885	A	19900320	BR 1989-3885	19890802
US 5186736	A	19930216	US 1991-728632	19910711

PRIORITY APPLN. INFO.: DE 1988-3826230 A 19880802
US 1989-387531 A3 19890731
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): CASREACT 113:59231; MARPAT 113:59231
GI

L7 ANSWER 94 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



II

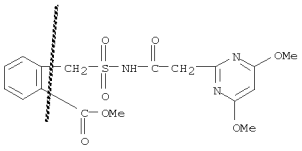
AB L(X)mSO2NR1C(W)(CR2R3)nA [I; R1 = H, alkyl, alkenyl, alkynyl; R2, R3 = H, alkyl, Ph; R4 = H, alkyl, haloalkyl, Ph; X = CHR2, O, NR4; W = O, S, NR4, NOR4; L = (substituted) Ph, naphthalinyl, furyl, thienyl, pyrazolyl, pyridyl; A = (substituted) triazinyl, cyclopentapyrimidinyl, furylpyrimidinyl, triazolyl triazinyl, etc.], were prepared Thus, a mixture of DCC, 4-dimethylaminopyridine, and 4,6-dimethoxypyrimidine-2-carboxylic acid (preparation given) in CH2Cl2 at 0-2° was treated with 2-MeO2CC6H4SO2NH2 to give pyrimidinylcarbonylsulfonamide II. II at 0.3 kg/ha preemergent gave complete control of Sinapsis alba and Chrysanthenum segetum.

IT 128276-45-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as herbcide and plant growth regulator)

RN 128276-45-9 CAPLUS

CN Benzoic acid, 2-[[[[2-(4,6-dimethoxy-2-pyrimidinyl)acetyl]amino]sulfonyl]methyl]-, methyl ester (CA INDEX NAME)

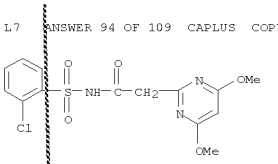


IT 128276-42-6P 128276-43-7P 128276-44-8P
128276-45-9P 128276-46-0P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as herbicide and plant growth regulator)

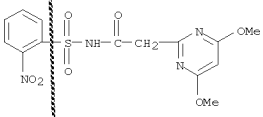
RN 128276-42-6 CAPLUS

CN 2-Pyrimidineacetamide, N-[(2-chlorophenyl)sulfonyl]-4,6-dimethoxy- (CA INDEX NAME)



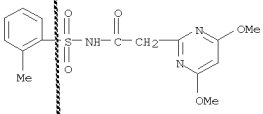
RN 128276-43-7 CAPLUS

CN 2-Pyrimidineacetamide, 4,6-dimethoxy-N-[(2-nitrophenyl)sulfonyl]- (CA INDEX NAME)



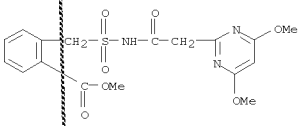
RN 128276-44-8 CAPLUS

CN 2-Pyrimidineacetamide, 4,6-dimethoxy-N-[(2-methylphenyl)sulfonyl]- (CA INDEX NAME)



RN 128276-45-9 CAPLUS

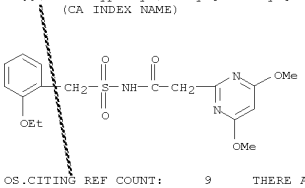
CN Benzoic acid, 2-[[[[2-(4,6-dimethoxy-2-pyrimidinyl)acetyl]amino]sulfonyl]methyl]-, methyl ester (CA INDEX NAME)



RN 128276-46-0 CAPLUS

L7 ANSWER 94 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

CN 2-Pyrimidineacetamide, N-[[(2-ethoxyphenyl)methyl]sulfonyl]-4,6-dimethoxy- (CA INDEX NAME)



OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

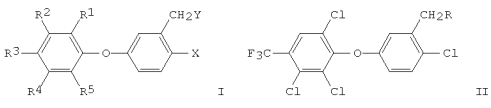
L7 ANSWER 95 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1990:178357 CAPLUS
DOCUMENT NUMBER: 112:178357
ORIGINAL REFERENCE NO.: 112:30149a,30152a
TITLE: Preparation of [(halophenoxy)phenyl]alkanoates and analogs as herbicides
INVENTOR(S): Kirsten, Rolf; Busse, Ulrich; Santel, Hans Joachim; Schmidt, Robert R.; Strang, Harry
PATENT ASSIGNEE(S): Bayer A.-G., Fed. Rep. Ger.
SOURCE: Ger. Offen., 43 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3812768	A1	19891026	DE 1988-3812768	19880416
EP 338306	A2	19891025	EP 1989-105791	19890403
R: BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
DK 8901811	A	19891017	DK 1989-1811	19890414
BR 8901796	A	19891128	BR 1989-1796	19890414
ZA 8902736	A	19891227	ZA 1989-2736	19890414
JP 02006423	A	19900110	JP 1989-93303	19890414
HU 51101	A2	19900428	HU 1989-1864	19890414
AU 8933079	A	19891019	AU 1989-33079	19890417
PRIORITY APPLN. INFO.:			DE 1988-3812768 A	19880416

OTHER SOURCE(S): MARPAT 112:178357

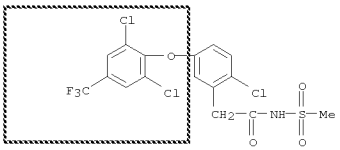
GI



I II

AB The title compds. (I; R1 = H, halo, cyano, CF3; R2, R4, R5 = H, halo; R3 = halo, cyano, CF3, CF3O, CF3SO2; X = halo; Y = halo, cyano, alkoxycarbonyl, etc.) were prepared as herbicides (no data). Thus, phenoxybenzyl bromide II (R = Br) was refluxed 12 h with NaCN in aqueous EtOH and the product stirred

L7 ANSWER 95 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
12 h in Et2O-MeOH contg. HCl to give II (R = CO2Me).
IT 126565-64-8P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as herbicide)
RN 126565-64-8 CAPLUS
CN Benzeneacetamide, 2-chloro-5-[2,6-dichloro-4-(trifluoromethyl)phenoxy]-N-(methylsulfonyl)- (CA INDEX NAME)

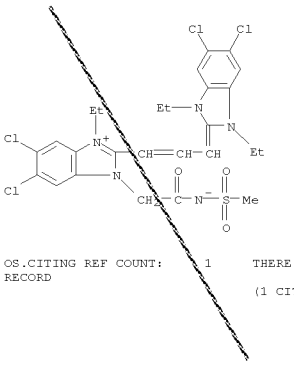


L7 ANSWER 96 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1982:464127 CAPLUS
DOCUMENT NUMBER: 97:64127
ORIGINAL REFERENCE NO.: 97:10599a,10602a
TITLE: Photographic recording material with variable contrast
INVENTOR(S): Gernert, Herbert; Burger, Theo
PATENT ASSIGNEE(S): Agfa-Gevaert A.-G. , Fed. Rep. Ger.
SOURCE: Ger. Offen., 35 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3028167	A1	19820401	DE 1980-3028167	19800725

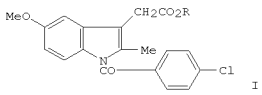
<--
PRIORITY APPLN. INFO.: DE 1980-3028167 19800725
<--
AB A variable contrast photog. material is described which possesses high sensitivity for scanner exposure and shows a sufficiently steep gradation in the blue spectral region for use as a scan film along with a 50-100% flatter gradation in the green spectral region in comparison to the blue exposure. The material consists of a support with 2 emulsion layers, one of which is sensitive to blue and green light and the other which is sensitive to blue light. The exposure factor of the gradation curve for the blue sensitive layer lies in the region of its green sensitivity upon exposure of the material with light from 500 to 620 nm at a d. of 1.0-2.0 of the gradation for the green sensitivity. The material is especially useful
in the production of color sepns. by exposure with a scanner and exposure in a
copy apparatus for a γ-λ-variable material.
IT 53132-00-6
RL: TEM (Technical or engineered material use); USES (Uses)
(photog. sensitizer, for variable contrast films for scanner exposure)
RN 53132-00-6 CAPLUS
CN 1H-Benzimidazolium, 5,6-dichloro-2-[3-(5,6-dichloro-1,3-diethyl-1,3-dihydro-2H-benzimidazol-2-ylidene)-1-propen-1-yl]-1-ethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

L7 ANSWER 96 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

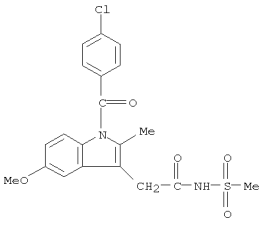
L7 ANSWER 97 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1981:406959 CAPLUS
DOCUMENT NUMBER: 95:6959
ORIGINAL REFERENCE NO.: 95:1314h,1315a
TITLE: Chemical structure and antiinflammatory activity in the group of substituted indole-3-acetic acids
AUTHOR(S): Boltze, K. H.; Brendler, O.; Jacobi, H.; Opitz, W.; Raddatz, S.; Seidel, P. R.; Vollbrecht, D.
CORPORATE SOURCE: Abt. Chem. Forsch., Troponwerke G.m.b.H. and Co. K.-G., Cologne, 5000/80, Fed. Rep. Ger.
SOURCE: Arzneimittel-Forschung (1980), 30(8A), 1314-25
CODEN: ARZNAD; ISSN: 0004-4172
DOCUMENT TYPE: Journal
LANGUAGE: German
OTHER SOURCE(S): CASREACT 95:6959
GI



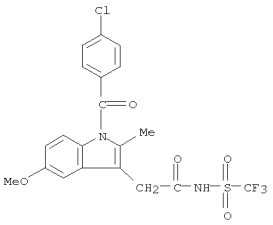
I

AB About 110 potential antiinflammatory compds. were prepared by systematically
modifying indometacin (I; R = H) by modifying the α-methylene group, derivatizing the CO2H group, substituting the 4-ClC6H4CO moiety by ether aryl groups, introducing other substituents into the indole ring, and fusing other heterocycles to the indole ring. Of all these compds., acemetacin (I; R = CH2CO2H) showed .apprx.2 times the activity of I (R = H) in the kaolin-induced rat paw edema test. Further modification of acemetacin did not improve its activity. Apparently substitution of the indole nucleus and the acetoxyacetic acid side chain are responsible for the high activity.
IT 76812-29-8P 76812-30-1P 76812-31-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 76812-29-8 CAPLUS
CN 1H-Indole-3-acetamide, 1-(4-chlorobenzoyl)-5-methoxy-2-methyl-N-(methylsulfonyl)- (CA INDEX NAME)

L7 ANSWER 97 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

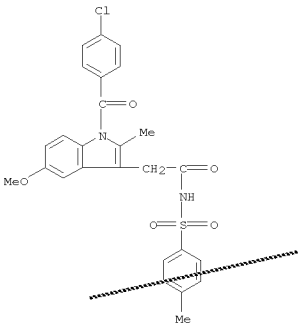


RN 76812-30-1 CAPLUS
CN 1H-Indole-3-acetamide, 1-(4-chlorobenzoyl)-5-methoxy-2-methyl-N-[(trifluoromethyl)sulfonyl]- (CA INDEX NAME)



RN 76812-31-2 CAPLUS
CN 1H-Indole-3-acetamide, 1-(4-chlorobenzoyl)-5-methoxy-2-methyl-N-[(4-methylphenyl)sulfonyl]- (CA INDEX NAME)

L7 ANSWER 97 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

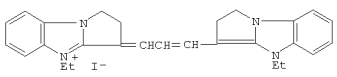


OS.CITING REF COUNT: 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

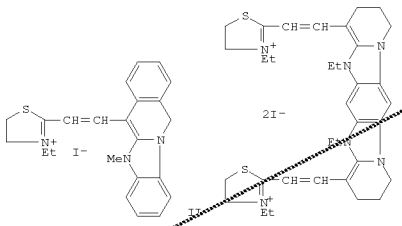
L7 ANSWER 98 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1976:464804 CAPLUS
DOCUMENT NUMBER: 85:64804
ORIGINAL REFERENCE NO.: 85:10427a,10430a
TITLE: Methine dyes
INVENTOR(S): Libeer, Marcel J.; Depoorter, Henri; Van Mierlo, Gerrit G.; Lemahieu, Raymond G.
PATENT ASSIGNEE(S): Agfa-Gevaert N. V., Belg.
SOURCE: U.S., 46 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3931156	A	19760106	US 1973-355770	19730430
PRIORITY APPLN. INFO.:			GB 1961-19269	A 19610529
			US 1962-197925	A3 19620528
			US 1966-547140	A1 19660202

GI



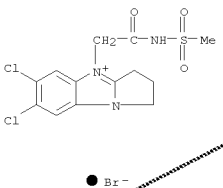
I



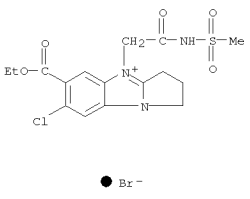
II III

AB One hundered thirty-four cyanine dyes containing the pyrrolobenzimidazole, benzimidazoloisoquinoline, and dipyridinolbenzodiimidazole nuclei were prepared and their photosensitizing properties determined in Ag halide emulsions.

L7 ANSWER 98 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
The syntheses of the heterocyclic nuclei and the cyanine dyes derived from them were given. Representative dye structure are: I [59506-84-2], II [59506-85-3], and III [59506-86-4].
IT 59504-84-6P 59504-92-6P 59504-99-3P
59505-22-5P
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation and cyanine dye manufacture from)
RN 59504-84-6 CAPLUS
CN 1H-Pyrrolo[1,2-a]benzimidazolium, 6,7-dichloro-2,3-dihydro-4-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)

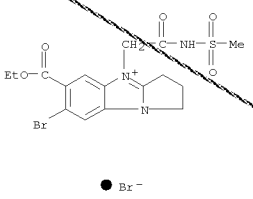


RN 59504-92-6 CAPLUS
CN 1H-Pyrrolo[1,2-a]benzimidazolium, 7-chloro-6-(ethoxycarbonyl)-2,3-dihydro-4-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)

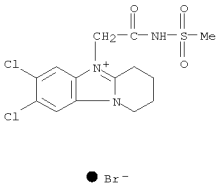


RN 59504-99-3 CAPLUS
CN 1H-Pyrrolo[1,2-a]benzimidazolium, 7-bromo-6-(ethoxycarbonyl)-2,3-dihydro-4-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)

L7 ANSWER 98 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

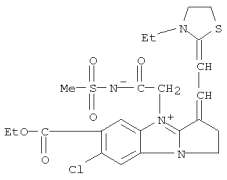


RN 59505-22-5 CAPLUS
CN Pyrido[1,2-a]benzimidazolium, 7,8-dichloro-1,2,3,4-tetrahydro-5-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)

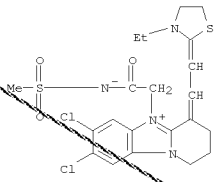


IT 59505-69-0P 59505-76-9P 59505-84-9P
59506-52-4P 59506-71-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and photosensitizing properties of)
RN 59505-69-0 CAPLUS
CN 1H-Pyrrolo[1,2-a]benzimidazolium, 7-chloro-6-(ethoxycarbonyl)-3-[2-(3-ethyl-2-thiazolidinylidene)ethylidene]-2,3-dihydro-4-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

L7 ANSWER 98 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

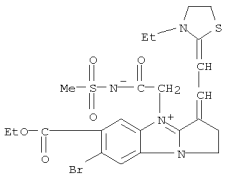


RN 59505-76-9 CAPLUS
CN Pyrido[1,2-a]benzimidazolium, 7,8-dichloro-4-[2-(3-ethyl-2-thiazolidinylidene)ethylidene]-1,2,3,4-tetrahydro-5-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

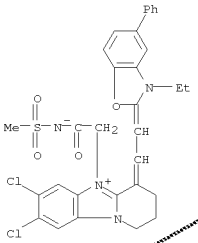


RN 59505-84-9 CAPLUS
CN 1H-Pyrrolo[1,2-a]benzimidazolium, 7-bromo-6-(ethoxycarbonyl)-3-[2-(3-ethyl-2-thiazolidinylidene)ethylidene]-2,3-dihydro-4-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

L7 ANSWER 98 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

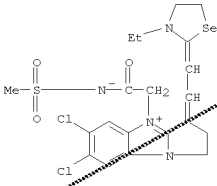


RN 59506-52-4 CAPLUS
CN Pyrido[1,2-a]benzimidazolium, 7,8-dichloro-4-[2-(3-ethyl-5-phenyl-2(3H)-benzoxazolylidene)ethylidene]-1,2,3,4-tetrahydro-5-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



RN 59506-71-7 CAPLUS
CN 1H-Pyrrolo[1,2-a]benzimidazolium, 6,7-dichloro-3-[2-(3-ethyl-2-selenazolidinylidene)ethylidene]-2,3-dihydro-4-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

L7 ANSWER 98 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



OS CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

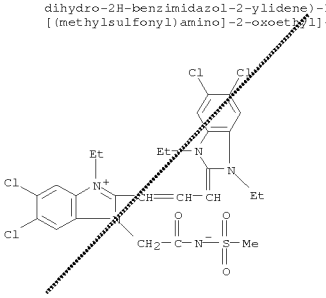
L7 ANSWER 99 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1974:444048 CAPLUS
DOCUMENT NUMBER: 81:44048
ORIGINAL REFERENCE NO.: 81:6997a,7000a
TITLE: Influence of the habit of silver halide crystals on the absorption spectra of adsorbed sensitizing dyes. II. Silver chloride emulsions
AUTHOR(S): Vanassche, W.; Claes, F. H.; Borginon, H.; Libeer, J.
CORPORATE SOURCE: Res. Lab., Agfa-Gevaert N. V., Mortsel, Belg.
SOURCE: Photogr. Sensitivity, Proc. Symp. (1973), Meeting Date 1972, 265-81. Editor(s): Cox, R. J. Academic: London, Engl.
CODEN: 28NDAQ
DOCUMENT TYPE: Conference
LANGUAGE: English

AB A new crystallog. form, the {100} habit, of AgCl was prepared The absorption spectra of sensitizing dyes adsorbed on AgCl crystals with different crystallog. habits in photog. emulsions are affected by the crystal shape. Unlike AgBr, the cubic habit of AgCl induces J-aggregation. The J-band is weakened or disappears when the dye is adsorbed on octahedral or dodecahedral crystals. An explanation for this J-aggregation was previously proposed for the absorption spectrum of dyes adsorbed on AgBr crystals. There are effects other than surface structures; AgCl and AgBr differ in the intensity of hydration of the halide ion, and the signs of the space charge layers are opposed. The {110} and {111} crystals of AgCl induce M-or D-absorption maximum

IT 53132-00-6
RL: USES (Uses)
(absorption spectra of sorbed photog. sensitizer, silver halide crystal habit effect on)

RN 53132-00-6 CAPLUS
CN 1H-Benzimidazolium, 5,6-dichloro-2-[3-(5,6-dichloro-1,3-diethyl-1,3-dihydro-2H-benzimidazol-2-ylidene)-1-propen-1-yl]-1-ethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



L7 ANSWER 99 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

L7 ANSWER 100 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1971:525057 CAPLUS
DOCUMENT NUMBER: 75:125057
ORIGINAL REFERENCE NO.: 75:19749a,19752a
TITLE: Photosensitive copying materials containing diazo dyes
INVENTOR(S): Poot, Albert L.; Depoorter, Henri
PATENT ASSIGNEE(S): Agfa-Gevaert A.-G.
SOURCE: Ger. Offen., 16 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2059192	A	19710609	DE 1970-2059192	19701202
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CA 968211	A1	19750527	CA 1970-98246	19701116
<--				
FR 2072685	A5	19710924	FR 1970-43073	19701130
<--				
JP 48041202	B	19731205	JP 1970-105761	19701130
<--				
CH 569986	A5	19751128	CH 1970-17563	19701130
<--				
US 3676138	A	19720711	US 1970-94574	19701202
<--				
NL 7017685	A	19710607	NL 1970-17685	19701203
<--				
PRIORITY APPLN. INFO.:			GB 1969-59093 A	19691203
<--				

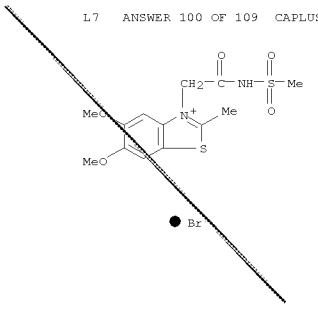
GI For diagram(s), see printed CA Issue.

AB Photosensitive copying materials were prepared in which an image was formed by coupling, in alkaline medium, a diazonium compound and a quaternary salt of structure I or II, where R is a substituted or unsubstituted aliphatic or cycloaliphatic group, n = 1 or 2, and X- is an anion. For example, a mixture of p-(diethylamino)benzenediazonium tetrafluoroborate 6, 2-methyl-3-[[(methylsulfonyl)carbamoyl]methyl]-5,6-dimethoxy-benzothiazolium bromide (I,R = CH2CONHSO2Me, X = Br) 8, citric acid 40, tri-Na naphthalenetrisulfonate (III) 8, urea 20, silica 1, and saponin 0.5 g, and 56 ml 25% aqueous III was diluted with H2O to 400 ml, coated on a paper support, and dried. A black image with colorless background was formed when the coated paper was exposed through a diapos. and developed with NH3.

IT 34238-95-4
RL: USES (Uses)
(diazo process coupler)

RN 34238-95-4 CAPLUS
CN Benzothiazolium, 5,6-dimethoxy-2-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)

L7 ANSWER 100 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



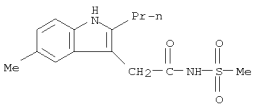
L7 ANSWER 101 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1971:498443 CAPLUS
DOCUMENT NUMBER: 75:98443
ORIGINAL REFERENCE NO.: 75:15561a,15564a
TITLE: Indole-3-acetic acid derivatives as muscle stimulants
INVENTOR(S): Rooney, Clarence S.; Gleason, Clarence H.
PATENT ASSIGNEE(S): Merck Sharp and Dohme (I.A.) Corp.
SOURCE: Ger. Offen., 59 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2062017	A	19710812	DE 1970-2062017	19701216
CA 903210	A	19720620	CA 1970-73875	19700203
US 3758500	A	19730911	US 1970-92210	19701123
ZA 7007949	A	19720726	ZA 1970-7949	19701124
NL 7017488	A	19710805	NL 1970-17488	19701130
FR 2081481	A5	19711203	FR 1970-43350	19701202
FR 2081481	B1	19740322		
GB 1291657	A	19721004	GB 1970-1291657	19701202
SE 372266	B	19741216	SE 1970-16301	19701202
IL 35771	A	19741231	IL 1970-35771	19701202
DK 129993	B	19741209	DK 1970-6190	19701204
HU 162286	B	19730129	HU 1970-ME1302	19701210
JP 48029224	B	19730908	JP 1970-121852	19701229
US 3833608	A	19740903	US 1972-289511	19720915

PRIORITY APPLN. INFO.: CA 1970-73875 A 19700203
US 1970-92210 A3 19701123

GI For diagram(s), see printed CA Issue.
AB The title compds. (I, R = Pr, Bu, or CH2CH2Cl; R1 = CO2H, CONHSO2NMe2, CONHSO2Me, CONHSO2C6H4Me-p, SO2NHMe, SO2NHCONMe2, SO(:NH)Me, or CONHAc; R2 = H or Me), useful as muscle stimulants and for treatment of myasthenia gravis, were prepared Thus, reaction of BuCOCl with 2,4-Me2C6H3NH2 gave the amide, which on reaction with NaNH2 gave 2-butyl-3-methylindole (II).

L7 ANSWER 101 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
Reaction of II with HCHO/Me2NH gave I (R = Bu, R1 = NMe2, R2 = Me), the MeI salt of which reacted with KCN to give I (R = Bu, R1 = CN, R2 = Me) (III). Reaction of III with KOH in H2O-EtOH gave I (R = Bu, R1 = CO2H, R2 = Me). Also prepd. were 9 other I.
IT 33414-10-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 33414-10-7 CAPLUS
CN 1H-Indole-3-acetamide, 5-methyl-N-(methylsulfonyl)-2-propyl- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

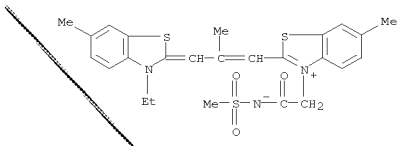
L7 ANSWER 102 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1970:95344 CAPLUS
DOCUMENT NUMBER: 72:95344
ORIGINAL REFERENCE NO.: 72:17325a,17328a
TITLE: Sensitized zinc oxide photoconductor compositions
INVENTOR(S): Verhille, Karel E.; Noe, Robert J.; Voet, Luciaan F.; Depoorter, Henri
PATENT ASSIGNEE(S): Gevaert-Agfa N. V.
SOURCE: Fr., 28 pp.
CODEN: FRXXAK
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 1560976		19690321	FR	19680424
GB 1199062			GB	
US 3617269		19711102	US	19680426

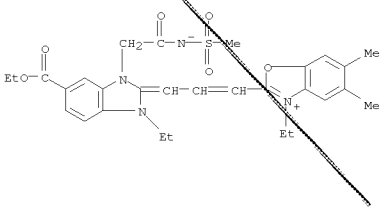
PRIORITY APPLN. INFO.: GB 19670426

GI For diagram(s), see printed CA Issue.
AB Carbocyanines I, where n is 0 and 1 (X is Br and I), are added to dispersions of ZnO in vinyl copolymer solution andthe compns. are coated on parchment paper to give layers 3-10 μ thick. The ZnO-binder weight ratio is 1:0.1-1:0.6, the amount of I added is 0.0-1mg/g ZnO, and the coating compns.contain 95-60 weight% ZnO. Thus, a dispersion prepared from 20 g ZnO, 25 ml H2O, and 1 ml 10% maleic anhydride-1-vinylpyrrolidone copolymer (1:9 NH3-water) is added to a solution of 2 g vinyl acetate-crotoric acid copolymer and 1.25 ml melamine-formaldehyde resin in 25 ml water and 1 ml 25% NH3,, and a 0.1% solution of I [R =r1 = O,R2 =CH2CONHSO2Me,, R3 = Et, R5 = R7 = PhCH2, R4 = R6 =R8 = H, n = 1 (X= I] is added at 0.5mg/g ZnO. The composition is coated on a baryta paper to give 25 g ZnO/m2, charged (-7000 V), irradiated for 15 sec (2240 lux, 2750°K), and developed. The sensitivity is more than double that of a standard photoconductor material. Also used are sM40 addnl. tA, where R and R1,R2 and R3, and R5 and R7 are the same or different, R and R1 are O, S, Se, and NEt, R2 and R3 are Et, (CH2)nSO2NHAc and (CHnSO2N-Ac, CH2CONHSO2Me,CH2CON-SO2Me, and (CH2)3-OSO3-, R4 and R6 are H and Me, R5 and R7 are PHCH2, PH, Me, and OMe, and R8 is H or a C1-3 alkyl group.
IT 27276-62-6 27570-44-1
RL: TEM (Technical or engineered material use); USES (Uses)
(zinc oxide photoconductor sensitized by, for electrophotography)
RN 27276-62-6 CAPLUS
CN Benzothiazolium, 2-[3-(3-ethyl-6-methyl-2(3H)-benzothiazolylidene)-2-methyl-1-propen-1-yl]-6-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

L7 ANSWER 102 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



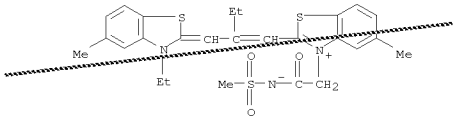
RN 27570-44-1 CAPLUS
CN Benzoxazolium, 2-[3-[5-(ethoxycarbonyl)-1-ethyl-1,3-dihydro-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2H-benzimidazol-2-ylidene]-1-propen-1-yl]-3-ethyl-5,6-dimethyl-, inner salt (CA INDEX NAME)



L7 ANSWER 103 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1969:466036 CAPLUS
DOCUMENT NUMBER: 71:66036
ORIGINAL REFERENCE NO.: 71:12197a,12200a
TITLE: Red sensitive silver halide films
INVENTOR(S): Goetze, Johannes; Riester, Oskar; Philippaerts, Herman
A.; Ghys, Theofiel H.; Haze, Marie; Kueffner, Karl
PATENT ASSIGNEE(S): Gevaert-Agfa N. V.
SOURCE: Belg., 29 pp.
CODEN: BEXXAL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 713449		19681010	BE	
<--				
DE 1547641			DE	
DE 1597474			DE	
FR 1559508			FR	
GB 1223191			GB	
US 3615634		19711026	US	19680402
<--				
PRIORITY APPLN. INFO.:			DE	19670410
<--				
			DE	19670824
<--				

GI For diagram(s), see printed CA Issue.
AB A Ag(Br, I) emulsion containing 4.7 mole % AgI and 0.3 mole AgX/-kg. emulsion is sensitized with 20 mg. of a I-type dye and coated on cellulose acetate base. The film has no sensitivity in the blue and a λmaximum at 730 nm.
IT 24687-41-0
RL: USES (Uses)
(photographic sensitizer)
RN 24687-41-0 CAPLUS
CN Benzothiazolium, 2-[2-[(3-ethyl-5-methyl-2(3H)-benzothiazolylidene)methyl]-1-buten-1-yl]-5-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

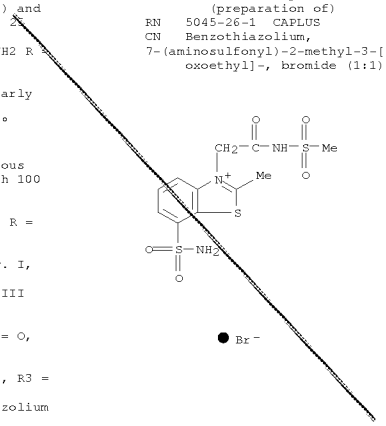


L7 ANSWER 103 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)

L7 ANSWER 104 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1966:68495 CAPLUS
DOCUMENT NUMBER: 64:68495
ORIGINAL REFERENCE NO.: 64:12857e-h,12858a-e
TITLE: Photographic methine dye sensitizers
PATENT ASSIGNEE(S): Gevaert-Agfa N. V.
SOURCE: 30 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 6511017		19651025	NL 1965-11017	19650824
<--				
PRIORITY APPLN. INFO.:			GB	19640825
<--				

GI For diagram(s), see printed CA Issue.
AB 2,3-Dimethyl-4-sulfamoylbenzothiazolium p-toluenesulfonate (4.15 g.) and 3.55 g. 2-(2-acetanilidovinyl)-3-ethylthiazolidinium bromide (I) in 25 cc. EtOH refluxed 5 min. with 2.8 cc. Et3N yielded II (X = H, X1 = SO2NH2 R = Me, R1 = Et, A = Br), m. >260° (PhOH), λmaximum 508 mμ (log ε 5.15) (the absorption maximum and log ε values are given throughout this abstract in brackets and parentheses, resp.) Similarly were prepared II (X = H, X1 = AcNHSO2, R = Me, R1 = Et, A = Br), m. >260° [508 (5.20)], and III (X = SO2N-Ac, R = R1 = Et), m. >270° [504 (5.10)]. 2-Methyl-3-[N-(methylsulfonyl)carbamoylmethyl]-7-sulfamoylbenzothiazolium bromide (6.2 g.) and 5 g. I in 75 cc. aqueous MeOCH2CH2OH, treated, with cooling, with 4 cc. Et3N and diluted with 100 cc. EtOH gave III (X = SO2NH2, R = MeSO2N-COCH2, R1 = Et), m. 220° (PhOH-EtOH), [502]. Similarly was prepared II (X = SO2NH2, X1 = H, R = R1 = Et, A = Br) [501 (5.07)]. 2,3-Dimethyl-7-(methylsulfonamido)benzothiazolium Me sulfate (IV) (3.7 g.), 3.55 g. I, 25 cc. EtOH, and 2.8 cc. Et3N shaken 0.5 hr. at room temperature gave III (X = MeSO2N-, R = Me, R1 = Et), m. 276-8° (1:1 EtOH-H2O) [506 (4.96)]. Similarly was prepared V (X = MeSO2N-, R1 = R4 = R5= Me, R3 = H, Z = O, R2 = Et), m. 281-2° [530(5.16)]. IV (7.6 g.), 7.6 g. HC(OEt)3, and 50 cc. Ac2O refluxed 20 min. gave VI[X = X1 = Ac(MeSO2)N, R1 = R2 = Me, R3 = R4 = R5 = H, Z = S, A = MeSO4], m. 278-81° (diacetone alc.-EtOH-H2O) [566 (4.82)]. 3-Ethyl-2-methyl-7-sulfamoylbenzothiazolium p-toluenesulfonate (4.3 g.) and 3.6 g. 2-(2-methyl-2-methylthiovinyl)-3-ethylbenzothiazolium sulfate in 60 cc. C5H5N refluxed 0.5 hr. with 1.4 cc. Et3N gave VI (X = SO2NH2, X1 = R4 = R5 = H, R1 = R2 = Et, R3 = Me, Z = S, A = MeSO4), m. 260° (PhOH) [547 (5.11)]. Similarly were prepared VI (X = SO2NH2, X1 = R4 = H, R1 = R2 = Me, R3 = Et, R5 = Ph, Z = S, A = MeSO4), m. >260° [551 (4.98)], V (X = AcN-SO2, R1 = R2 = Et, R3 = Me, R4 = R5 = H, Z = S), m. >270° [545 (4.94)], VII (X = MeSO2NH, A = MeSO4), m. 249-50° [568 (4.80)], VIII, m. 265-7° [582 (5.14)], VII (X = Me2NSO2NH, A = iodine), m.



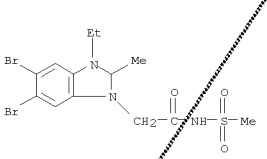
L7 ANSWER 104 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
192° [569 (5.06)], V (X = AcN-SO2, R1 = R2 = Me, R3 = Et, R4 = H, R5 = Ph, Z = S), m. >270° [551 (4.80)].
2,3-Dimethyl-7-(methylsulfonamido)benzothiazolium Me sulfate (3.68 g.), 4.5 g. 2-(2-acetanilidovinyl)-3-ethylbenzothiazolium iodide, 3.8 cc. Et3N, and 50 cc. EtOH refluxed 0.5 hrs. gave VI (X = MeSO2NH, X1 = R3 = R4 = R5 = H, R1 = Me, R2 = Et, Z = S, A = iodine), m. 207-9° (2:1 diacetone alc.-H2O) [559 (5.12)].
2-(2-Anilidovinyl)-3-methyl-7-(methylsulfonamido)-benzothiazolium methylsulfate (4.7 g.), 1.6 g. 3-ethylthiazolidine-2-thion-4-one, 2.4 cc. Et3N, and 25 cc. Ac2O refluxed 15 min. gave IX (Z = S), m. 265° (diacetone alc.) [516 (4.53)]. Similarly were prepd. IX (Z = PhN), m. 275-8° [506 (4.39)], and X, m. 265° [4.92 (4.77)]. The sensitization max. of the various methine dyes in AgCl emulsions were detd. and are tabulated.
IT 5045-26-1P, Benzothiazolium, 2-methyl-3-[[(methylsulfonyl)carbamoyl]methyl]-7-sulfamoyl-, bromide
RL: PREP (Preparation)
(preparation of)
RN 5045-26-1 CAPLUS
CN Benzothiazolium, 7-(aminosulfonyl)-2-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)

L7 ANSWER 105 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1963:442230 CAPLUS
DOCUMENT NUMBER: 59:42230
ORIGINAL REFERENCE NO.: 59:7692c-g
TITLE: Benzimidazole methine dyes
PATENT ASSIGNEE(S): Gevaert Photo-Producten N.V.
SOURCE: 19 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
PATENT INFORMATION:

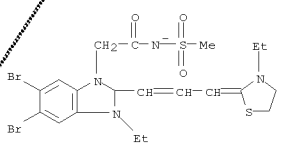
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 619851		19621031	BE	
GB 980234			GB	
PRIORITY APPLN. INFO.:			GB	19610706

GI For diagram(s), see printed CA Issue.
AB Benzimidazole methine dyes of the general formula I, where n = 0, 1, or 2, and Z is a selenazoline or benzimidazole ring system were prepared for use as photographic sensitizers. 1-Ethyl-2-methyl-5,6-dibromobenzimidazole (II) (6.5 g.) and 2.2 cc. EtI heated 15 hrs. in a sealed tube at 120°, powdered, and washed with Et2O yielded 8.5 g. 1,3-diethyl-2-methyl-5,6-dibromobenzimidazolium iodide (III), m. 294-6°. II (6.5 g.) and 10.8 g. BrCH2CONHSO2Me heated 48 hrs. at 105° gave 1-ethyl-2-methyl-3-[(methylsulfonylcarbamoyl)methyl]-5,6-dibromobenzimidazolium bromide (IV), m. 194°. 1,3,4-C6H3Br3 treated with HNO3 yielded 2,4,5-Br3C6H2NO2 (V), m. 95° (EtOH); V with EtNH2 gave orange 4,5,2-Br2(O2N)C6H2NHEt, m. 127°, which was reduced to EtNHBr2C6H2NH2, m. 62-4°, and heated with HCl and HOAc to give light brown II, m. 118-19°. 2-(2-Acetanilidovinyl)-3-ethylselenazolinium iodide (6.73 g.) and 7.11 g. III in C5H5N heated 20 min. at 140-50° with 6 cc. Et3N, cooled, and diluted with Et2O precipitated I (Z = 3-ethylselenazolin-2-ylidene, n = 1), m. 268°, λmaximum 472 mμ (log ε 5.049); it sensitizes a AgClAgBr emulsion with a maximum at 515 mμ. III (9.58 g.) and 7 cc. EtOCH:CHCH(OEt)2 refluxed 5 min., cooled, and filtered gave I (Z = 1,3-diethyl-5,6-dibromobenzimidazolin-2-ylidene, n = 2); m. 148-51° (MeOH and MeOCH2CH2OH), λmaximum 615 mμ (log ε 5.224), sensitization maximum (AgCl) 650 mμ. 1,3-Dimethyl-2-(methylthio)-5,6-dichlorobenzimidazolium methosulfate (3.70 g.) and 4.70 g. III in 25 cc. PhNO2 refluxed 45 min. with 2.8 cc. Et3N and diluted with Et2O yielded I (Z = 1,3-dimethyl-5,6-dichlorobenzimidazolin-2-ylidene, n = 0), m. 260-1° (EtOH) λmaximum 412 mμ (log ε 4.059), sensitization maximum (AgCl) 435 mμ. III (8.5 g.) in 70 cc. PhNO2 refluxed 40 min. with 9 cc. HC(OEt)3, cooled, and diluted with Et2O precipitated I (Z = 1,3-diethyl-5,6-dibromobenzimidazolin-2-ylidene, n = 1),

L7 ANSWER 105 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
red needles, m. 264-6° (MeOCH2CH2OH-PhOH-EtOH), λmax 518 mμ (log ε 5.30), sensitization max. (AgCl) 580 mμ. IV (5.34 g.), 3.5 g. 2-(2-acetanilidovinyl)thiazolinium bromide, 30 cc. C5H5N, and 1.7 cc. piperidine boiled 0.5 hr. and filtered gave VI, m. >250° (diacetone alc:), λmax. 417 mμ (log ε 4.8), sensitization max. (AgClAgBr) 510 mμ
IT 96473-31-3P, 5,6-Dibromo-1-ethyl-2-methyl-3-[[(methylsulfonyl)carbamoyl]methyl]benzimidazolium bromide 100171-06-0P, 5,6-Dibromo-1-ethyl-2-[3-(3-ethyl-2-thiazolidinylidene)propenyl]-3-[[(methylsulfonyl)carbamoyl]methyl]benzimidazolium hydroxide, inner salt
RL: PREP (Preparation)
(preparation of)
RN 96473-31-3 CAPLUS
CN 1H-Benzimidazolium, 5,6-dibromo-1-ethyl-2-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 100171-06-0 CAPLUS
CN 1H-Benzimidazolium, 5,6-dibromo-1-ethyl-2-[3-(3-ethyl-2-thiazolidinylidene)-1-propen-1-yl]-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L7 ANSWER 106 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1963:82273 CAPLUS
DOCUMENT NUMBER: 58:82273
ORIGINAL REFERENCE NO.: 58:14169h,14170a-h,14171a-g,14172a-c
TITLE: Sensitizers containing an imidazole nucleus substituted by a fluorine atom or a cyano radical
INVENTOR(S): Depoorter, Henri; Libeer, Marcel J.; Van Mierlo, Gerrit G.; Nys, Jean M.
PATENT ASSIGNEE(S): Gevaert Photo-Producten N. V.
SOURCE: 51 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 595980		19610413	BE	
DE 1180241			DE	
GB 955962			GB	
GB 955964			GB	
US 3264110		19660802	US 1964-341445	19640130
US 3268334		19660823	US 1964-341446	19640130
PRIORITY APPLN. INFO.:			GB	19511013

AB The title compds. are obtained by known methods. The following new products were prepared: 1,3-diethyl-2-methyl-5-cyanobenzimidazolium iodide, m. 260°; 1-ethyl-2-methyl-3-(β-hydroxyethyl)-5-cyanobenzimidazolium bromide, m. >250°; 1-ethyl-2-methyl-3-[[(methylsulfonyl)carbamoyl]methyl]-5-cyanobenzimidazolium bromide; 1-ethyl-2-methyl-3-(γ-sulfatopropyl)-5-cyanobenzimidazolium betaine; 1-ethyl-2-methyl-3-[ω-(acetylsulfamoyl)propyl]-5-cyanobenzimidazolium bromide; 1-ethyl-2-methyl-3- [ω-(acetylsulfamoyl)butyl]-5-cyanobenzimidazolium bromide; 1-(β-acetoxyethyl)-2-methyl-3-(β-hydroxyethyl)- 5-cyanobenzimidazolium bromide, m. 202°; 1,3-bis(β-acetoxyethyl)-2-methyl-5-cyanobenzimidazolium bromide, m. 250°; 1-ethyl-2-methyl-3-(β-acetoxyethyl)-5-cyanobenzimidazolium bromide; 1,3-diethyl-2-(β-anilinovinyl)-5-cyanobenzimidazolium iodide, m. 265°; I,3-diethy-2-[β-(phenylimino)ethylidene]-5-cyanobenzimidazoline, m. 175° (C6H6-C6H14); 1,3-diethyl-2-[β-(p-toluenesulfonanilido)-vinyl]-5-cyanobenzimidazolium chloride, m. 185°; 1,3-diethyl-2-methyl-5-chloro-6-cyanobenzimidazolium iodide; 1,3-diethyl-2-methyl-5-fluoro-6-cyanobenzimidazolium iodide, m. >250°; 1-ethyl-2-methyl-3-(β-hydroxyethyl)-5-fluorobenzimidazolium bromide, m. 248°; 1-ethyl-2-methyl-3-[ω(acetylsulfamoyl)-butyl]-5-fluorobenzimidazolium bromide, m. 198°; 1,3-diethyl-2-methyl-5-fluorobenzimidazolium iodide, m. 218°; 1,3-diethyl-2-(β-anilinovinyl)-5-chlorobenzimidazolium bromide, m. 228° (EtOH); 1,3-diethyl-2-[β-(phenylimino)ethylidene]-5-chlorobenzimidazoline, m. 157°; 1,3-diethyl-2-[β-(p-toluenesulfonanilido)vinyl]-5-chlorobenzimidazolium chloride, m. 187°; 1,3-diethyl-2-methyl-5-chloro-6-fluorobenzimidazolium iodide, m. 268-70°; 1,3-diethyl-2-(β-anilinovinyl)-5,6-

L7 ANSWER 106 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
dichlorobenzimidazolium, iodide, m. 265°;
1,3-diethyl-2-[β-(phenylimino)ethylidene]-5,6-dichlorobenzimidazoline, m. 140° (C6H6-C6H14);
1,3-diethyl-2-[β-(p-toluenesulfonanilido)vinyl]-5,6-dichlorobenzimidazolium chloride, m. 228°. From these intermediates the following new dyes were prepd. (m.p., λmax. in mμ, log ε, Ag halide, sensitizing limit, sensitization max., and sensitivity to light above 510 mμ in terms which correspond to a sensitivity of 100 for the non-sensitized emulsions given):

1,3-diethyl-2-[3-(1,3-di-ethyl-5-cyano-2-benzimidazolinytidene)propenyl]-5-cyanobenzimidazolium iodide, 267° (EtOH), 514, 5.32, Ag(Br, I), 595, 585, 305; 1,3-diethyl-2-[13-(3-ethyl-5-phenyl]-2-benzoxazolinylidene)propenyl]-5-cyanobenzimidazolium iodide, 178° (EtOH), 493, 4.61, AgCl, 555, 535, 265 and Ag (Cl, Br), 580, 560, 250;

1,3-diethyl-2-[3-(3-ethyl-5,6-dimethyl-2-benzoxazolinylidene)-propenyl]-5-cyanobenzimidazolium iodide, 248° (EtOH), 497, 5.07, AgCl, 570, 540, 255; 1,3-diethyl-2-[3-(3-ethyl-2-thiazolidinylidene)propenyl]-5-cyanobenzimidazolium iodide, 250° (EtOH), 472, 5.12, AgBr, 555, 525, 265; 1-ethyl-2-[3-(3-ethyl-2-[thiazolidinylidene)propenyl]-3-(β-acetoxyethyl)-5-cyanobenzimidazolium bromide, 162° (EtOH), 470, 5.11, AgBr, 540, 520, 200; 1-ethyl-2[3-(3-ethyl-5-methyl-2-benzoxazolinylidene)-propenyl]-3-(β-acetoxyethyl)-5-cyanobenzimidazolium bromide, 140° (EtOH), 491, 5.15, Ag(Br, I), 575, 555, 230; 1-ethyl-2-[3-(3-ethyl-5,6-dimethyl-2-benzoxazolinylidene)propenyl] - 3-[[(methylsulfonyl)carbamoyl]methyl] - 5 - cyanobenzimidazolium betaine, >250° (MeOCH2CH2OH-EtOH), 498, 5.22, Ag(Cl, I), 580, 545, 215; 1-ethyl-2-[3-(3-ethyl-5,6-dimethyl-2-benzoxazolinylidene)propenyl]-3-(γ-sulfatopropyl)-5-cyanobenzimidazolium betaine, >250° (MeOCH2CHOH), 500, 5.16, Ag(Br, I), 590, 570, 230 and AgBr, 580, 545, 255; 1-ethyl-2-[3-(3-ethyl-5,6-dimethyl-2-benzoxazolinylidene)propenyl]-3-[ω-(acetylsulfamoyl)-propyl]-5-cyanobenzimidazolium bromide, 162° (EtOH), 500, 5.17, Ag(Br, I), 590, 570, 255 and AgBr, 580, 545, 275; 1-ethyl-2-[3-(3-ethyl-2-benzoselenazolinylidene)propenyl]-3-(γ-sulfatopropyl)-5-cyanobenzimidazolium betaine, >260° (EtOH-Me2CO), 531, 5.03, Ag(Br, I), 630, 600, 325; 1-ethyl-2-[3-(3-ethyl-2-benzothiazolinylidene)propenyl]-3-[[(methylsulfonyl)-carbamoyl]methyl] - 5 - cyanobenzimidazolium betaine, >260° (EtCH), 524, 5.18, Ag (Br, I), 605, 585,305; 1-(β-acetoxyethyl)-2-[3-(1,3-diethyl-5,6-dichloro-2-benzimidazolinylidene)propenyl]-3-(β-hydroxyethyl)-5-cyanobenzimidazolium iodide, 214° (EtOH), 515, 5.32, AgBr, 600, 680, 275; 1,3-bis(β-acetoxyethyl)-2-[3-(1,3-diethyl-5,6-dichloro-2-benzimidazolinylidene)propenyl]-5-cyanobenzimidazolium bromide, 163° (EtOH), 513, 5.29, AgBr, 595, 575, 255; 1-ethyl-2-[3-(1,3-diethyl-5,6-dichloro-2-benzimidazolinylidene)propenyl] -
3 - [ω-(acetylsulfamoyl)butyl]-5-cyanobenzimidazolium bromide, >250° (EtOH), 514, 5.38, AgBr, 605, 590, 270; 1-ethyl-2-[3-[1-ethyl-3-(β-hydroxyethyl)-5-cyano-2-benzimidazolinylidene]propenyl]-3-(β-hydroxyethyl)-5-cyanobenzimidazolium iodide, 180° (EtOH), 517, 5.31;

L7 ANSWER 106 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
1-ethyl-2-[3-[1-ethyl-3-(β-acetoxyethyl)-5-cyano-2-benzimidazolinylidene]propenyl] -3-(β-acetoxyethyl)-5-cyanobenzimidazolium bromide, >250° (EtOH), 514, 5.34, Ag(Cl, Br), 605, 585, 295; 1-(β-acetoxyethyl)-2-[3-(1,3-diethyl-5-cyano-2-benzimidazolinylidene)propenyl] -3-(β - hydroxyethyl) - 5-cyanobenzimidazolium bromide, 188° (EtOH), 514, 5.32, Ag (Br, I), 605, 585, 305; 1,3-bis(β-acetoxyethyl)-2-[3-(1,3-diethyl-5-cyano-2-benzimidazolinylidene)propenyl] -5-cyanobenzimidazolium iodide, 201° (EtOH), 512, 5.28, --, --, --, --;
1,3-dethyl-2-[3-(3-ethyl-2-thiazolidinylidene)propenyl] -5-chloro-6-cyanobenzimidazolium iodide, >250° (EtOH-C5H5N and MeOCH2CH2OH), 479, 5.18, AgBr, 560, 540, 270;
1,3-diethyl-2-[3-(3-ethyl-2-thiazolidinylidene)propenyl] -5-fluoro-6-cyanobenzimidazolium iodide, 269° (EtOH), 472, 5.112, AgCl, 475, 440, 195 (total sensitivity); 1,3-diethyl-2-[3-(1,3-diethyl-5-chloro-2-benzimidazolinylidene)propenyl]-5-cyanobenzimidazolium iodide, >250° (EtOH), 507, 5.33, AgBr, 605, 580,340;
1-ethyl-2-[3-(3-ethyl-5-chloro-2-benzoxazolinylidene)propenyl]-3-(γ-sulfatopropyl)-5-cyanobenzimidazolium betaine, >260° (EtOH/Me2SO), 488, 5.06, AgCl, 555,530,210 and Ag(Cl, Br), 585, 565, 325;
1,3-diethyl-2-[(3-ethyl-2-benzoxazolinylidene)methyll-5-cyanobenzimidazolium iodide, --, 385 (EtOH), --, --, --, -- ,--;
1-ethyl-2-[3-(3-ethyl-2-thiazolidinylidene)propenyl]-3-(β-acetoxyethyl)-5-fluorobenzimidazolium perchlorate, 234° (EtOH) 459, 4.89, AgCl, 520,490,255; 1-ethyl-2-[3-(3-ethyl-5,6-dimethyl-2-benzoxazolinylidene)propenyl]-3-[ω(acetylsulfamoyl)butyl]-5-fluorobenzimidazolium bromide, 210°. (EtOH), 482, 5.07, Ag(Br, I), 565, 550, 230; 1,3-diethyl-2-[3-(1,3-diethyl-5-chloro-2-benzimidazolinylidene) propenyl]-5-fluorobenzimidazolium iodide, >250° (EtOH), 502, 5.28, AgCl, 585, 570, 385;
1-ethyl-2-[3-(1,3-diethyl-5,6-dichloro-2-benzimidazol-inylidene)propenyl]-3-(β-hydroxyethyl)-5-fluorobenzimidazolium bromide, >250° (EtOH) 514, 5.32, AgCl, 600, 580,385; 1,3-diethyl-2-
[3-(1,3-diethyl-5,6-dichloro-2-benzimidazolinylidene)propenyl]-5-chloro-6-fluorobenzimidazolium iodide, >250° (EtOH-C5H5N), 508, 5.82,--, --, --, --; 1,3-diethyl-2-[3-(3ethyl-5-phenyl-2-benzoxazolinylidene)propenyl]-5-fluorobenzimidazolium iodide, 250° (EtOH), 470, 4.88, AgBr, 555, 525, 145;
1,3-diethyl-2-[3-(3-ethyl-2-thiazolidinylidene)propenyl]-5fluorobenzimidazolium iodide, 232° (EtOH), 460, 4.87, AgBr, 540, 520, 165; 1,3-diethyl-2-[3-(1,3-diethyl-5-fluoro-2-benzimidazolinylidene)propenyl]-5-fluorobenzimidazolium iodide, 267° (EtOH), 504, 5.17, Ag(Br, I), 595, 570, 280;
1,3-diethyl-2-[3-(3-ethyl-5,6-dimethyl-2-benzoxazolinylidene)propenyl]-5-fluorobenzimidazolium iodide, 260° (EtOH), 480, 4.97, Ag(Cl, Br), 555, 520, 200;
1,3-diethyl-2-[3-(3-ethyl-2-benzothiazolinylidene)propenyl]-5-fluorobenzimidazolium iodide, 245° (EtOH), 507, 5.00, AgCl, 580, 555, 235 and Ag (Br, I), 605, 590, 270;
1,3-diethyl-2-[3-(3-ethyl-2-benzoxazolinylidene)propenyl]-5-fluorobenzimidazolium iodide, 255° (EtOH), 472, 5.00, AgCl, 540, 515, 110; 1,3-diethyl-2-[3-(3-ethyl-5-methyl-2-

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benzoxazolinylidene)propenyl]-5-fluorobenzimidazolium iodide, 247° (EtOH), 476, 5.02, AgCl, 545, 525, 130;
1,3-diethyl-2-[3-(1,3-diethyl-5,6-dichloro-2-benzimidazolinylidene)propenyll-5-fluorobenzimidazolium iodide, 260° (EtOH), 510, 5.31, Ag(Br, I), 600, 575, 330;
2-thio-3-ethyl-5-[(1,3-diethyl-5-cyano-2-benzimidazolinylidene)-ethylidene]-2,4-thiazolidinedione, >250° (EtOH-C5H5N), 518, 5.08, Ag (Br, I), 625, 590, 296;
1-methyl-2-thio-3-ethyl-5-[(1,3diethyl-5cyano-2-benzimidazolinylidene)ethylidene]-2,4-imidazolidinedione, 224-6° (EtOH), 526, --, AgCl, 600, 550, 415, (total sensitivity);
4-(1,3-diethyl-5-fluoro-2-benzimidazolinylidene)-2-cyanobutyronitrile, 208° (EtOH), 419, 4.91, AgCl, 465, 450, 215 (total sensitivity);
2-thio-3-ethyl-5-[(1,3-diethyl-5-fluoro-2-benzimidazolinylidene)ethylidene]-2,4-thiazolidinedione, 196° (EtOH), 514, 5.14, AgCl, 610, 550,470 (total sensitivity). Belg. 615,550,
July 16, 1962, Brit. Appl. Mar. 24, 1961 and Apr. 12, 1961; 18 pp. Addn. to Belg. 595,980. The following intermediate products were prepd.: 2,3-Br(O2N)C6H3CO2Et (I), m. 38-9° (EtOH), yield: 126 g. from 130 g. 2,3-Br(O2N)C6H3CO2H; 2,3-MeNH(O2N)C6H3CO2Et (II), m. 50° (MeOH), yield: 5 g. from 12.5 g. I; 3,2-H2N(MeNH)C6H3CO2Et (not sepd.); 1-methyl-2-mercapto-7-carbethoxybenzimidazole (III), m. 161° (C6H6), yield: 4.6 g. from 11.2 g. II; 1-methyl-2-(methylmercapto)-7-carbethoxybenzimidazole, b2 186-90°, yield: 0.85 g. from 2.36 g. III; 4,3-MeNH(O2N)C6H3CN (IV), m. 167° (MeOCH2CH2OH), yield: 45 g. from 67 g. 4,3-Br(O2N)C6H3CN; 3,4-H2N(MeNH)C6H3CN (V), m. 140-1° (C6H6-C6H14), yield: 6.2 g. from 11.1 g. IV; 1-methyl-2-mercapto-5-cyanobenzimidazole (VI), yield: 3.8 g. from 3 g. V; 1-methyl-2-(methylmercapto)-5cyanobenzimidazole (VII), m. 124° (petr. ether b. 90-120°), yield: 1.8 g. from 1.9 g. VI; 4,2-F(O2N)C6H3NHMe (VIII), m. 76° (C6H14), yield: 8.2 g. from 14.8 g. 4,2-F(O2N)C6H3NHAc and MeI; 1-methyl-2-mercapto-5-fluorobenzimidazole (IX), m. 230°, yield: 47.5 g. from 51.4 g. VIII; 1-methyl-2-(methylmercapto)-5-fluorobenzimidazole (X), m. 91° (Me2CO-H2O), yield: 43 g. from 49.2 g. IX; 4,3-MeNH(O2N)C6H3SO2NHMe (XI), m. 181°, yield: 89 g. from 102.5 g. 4,3-Cl(O2N)C6H3SO2Cl; 3,4-H2N(MeNH)C5H3SO2NHMe (XII), m. 103°, yield: 53.4 g. from 63.5 g. XI; 1-methyl-2-mercapto-5-(N-methylsulfamoyl)benzimidazole (XIII), m. 268°, yield: 42.1 g. from 36.9 g. XII; 1-methyl-2-(methylmercapto)-5-(N-methylsulfamoyl)benzimidazole, m. 191° (EtOH), yield: 3.7 g. from 5.14 g. XIII; 1-methyl-2-(methylmercapto)-5-(N-dimethylsulfamoyl)benzimidazole, m. 118° (AcOEt-C6H14), yield: 3.8 g. from 5.14 g. XIII. 1,3-dimethyl-2-(methyimercapto)-5-cyanobenzimidazolium Me sulfate, m. 160° yield: 16 g. from VII; 1,3-dimethyl-2-(methylmercapto)-5fluorobenzimidazolium Me sulfate, oil. The following dyes are prepd. (m.p., λmax. in mμ, log ε, type of emulsion, sensitization max., and sensitivity given): 1,3-diethyl-2-[5-(1,3-diethyl-5-cyano-2-benzimidazolinylidene)-1,3-pentadienyl]-5-cyanobenzimidazolium, iodide, 255° (MeOH and EtOH), 610, 5.212, Ag(Br, I), 645, 410 (minus blue);

1,3-dimethyl-2-[(1,3-diethyl-5-carbethoxy-2-benzimidazolinylidene)methyl]-5-fluorobenzimidazolium, perchlorate, 208° (EtOH), 402, 4.351, AgCl, 435, 475 (total); 1,3-dimethyl-2-[(1,3-diethyl-5-cyano-2-benzimidazolinylidene)methy]-5-cyanobenzimidazolium iodide, >250° (EtOH), 404, 4.340, AgCl, 440, 795;

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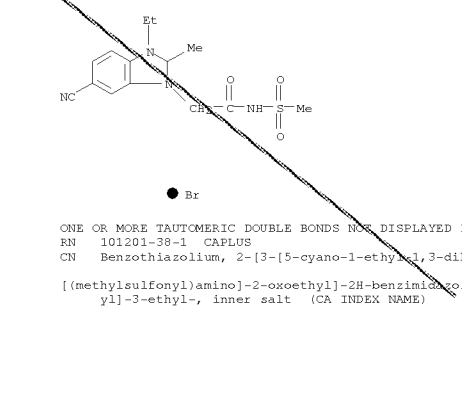
1,3-dimethyl-2-[(1,3-diethyl-5,6-dichloro-2-benzimidazolinylidene)methyl]-5-cyanobenzimidazolium. iodide, >250°, (EtOH), 409, 4.459, AgCl, 440, 825;
2-thio-3-allyl-5-(1,3-dimethyl-5-fluoro-2-benzimidazolinylidene)-2,4-thiazolidinedione, 246° (PrOH), 414, 4.618, AgCl, 460,845;
2-thio-3-ethyl-5-(1,3-dimethyl-5-cyano-2-benzimidazolinylidene)-2,4-thiazolidinedione, >250° (PrOH) 424, 4.880, AgCl, 470, 880.

IT 96775-39-2P, 5-Cyano-1-ethyl-2-methyl-3-[[(methylsulfonyl)carbamoyl]methyl]benzimidazolium bromide
101201-38-1P, 5-Cyano-1-ethyl-2-[3-(3-ethyl-2-benzothiazolinylidene)propenyl]-3-[[(methylsulfonyl)carbamoyl]methyl]benzimidazolium hydroxide, inner salt
103534-82-3P, 5-Cyano-1-ethyl-2-[3-(3-ethyl-5,6-dimethyl-2-benzoxazolinylidene)propenyl]-3-[[(methylsulfonyl)carbamoyl]methyl]benzimidazolium hydroxide, inner salt
106503-15-5P, 6,7-Dichloro-3-[2-(3-ethyl-2-thiazolidinylidene)ethylidene]-2,3-dihydro-4-[[(methylsulfonyl)carbamoyl]methyl]-1H-pyrrolo[1,2-a]benzimidazolium hydroxide, inner salt
RL: PREP (Preparation)
(preparation of)

RN 96775-39-2 CAPLUS
CN 1H-Benzimidazolium, 5-cyano-1-ethyl-2-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, hydrobromide (1:1) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 101201-38-1 CAPLUS
CN Benzothiazolium, 2-[3-[5-cyano-1-ethyl-1,3-dihydro-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2H-benzimidazol-2-ylidene]-1-propen-1-yl]-3-ethyl-, inner salt (CA INDEX NAME)

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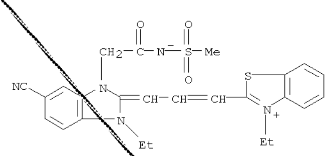
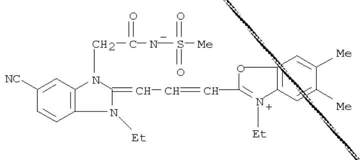
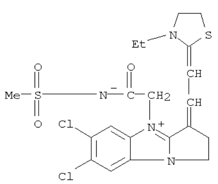


RN 103534-82-3 CAPLUS
CN Benzoxazolium, 2-[3-[5-cyano-1-ethyl-1,3-dihydro-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2H-benzimidazol-2-ylidene]-1-propen-1-yl]-3-ethyl-5,6-dimethyl-, inner salt (CA INDEX NAME)



RN 106503-15-5 CAPLUS
CN 1H-Pyrrolo[1,2-a]benzimidazolium, 6,7-dichloro-3-[2-(3-ethyl-2-thiazolidinylidene)ethylidene]-2,3-dihydro-4-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



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ACCESSION NUMBER: 1963:82272 CAPLUS
DOCUMENT NUMBER: 58:82272
ORIGINAL REFERENCE NO.: 58:14164f-h,14165a-h,14166a-h,14167a-h,14168a-h,14169a-h
TITLE: Methine dyes
PATENT ASSIGNEE(S): Gevaert Photo-Producten N.V.
SOURCE: 129 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 618235 <--		19620917	BE	
GB 1001061			GB	
US 3243298 <--		19660329	US 1962-197925	19620528

PRIORITY APPLN. INFO.: GB 19610529 <--

GI For diagram(s), see printed CA Issue.

AB New sym. and unsym. methine dyes for sensitizing photographic Ag halide emulsions are described. The new dyes are formed when benzimidazole derivs. of the general formulas I and II, where the aromatic nucleus may be substituted by Br, Cl, F, CO2Et, CO2H, AcNH, and CN, or by a sequence of atoms necessary to complete another aromatic ring, and where X = CH2, CH2CH2, or O, are quaternized with MeI, EtI, HOCH2CH2Br (III), AcNHSO2(CH2)4Br (IV), MeSO2NHCOCH2Br (V), HO2C(CH2)2Br (VI), or 1,3-propanediol sulfate (VII) and subsequently condensed with 2-(2-acetanilidovinyl)-3-ethyl-thiazolinium bromide (VIII), the 2-(2-anilinovinyl) analog (IX) of VIII, the selenazolium iodide analog (X) of VIII, 2-(2-phenyliminoethylidene)-3-ethyl-2,3-dihydrobenzoxazole (XI), the 5-Me derivative (XII) of XI, the 5-Ph derivative (XIII) of XI, 1,3-diethyl-2-[2-(p-toluenesulfonylanilino)vinyl]-5,6-dichlorobenzimidazolium chloride (XIV), 3-ethyl-5-(2-acetanilidovinylmethylene)-2-thio-2,4-thiazolidinedione (XV), or the 5-(3-acetanilidopropenylidene analog (XVI) of XV to yield unsym. methine dyes, or subsequently condensed with HC(OEt)3 or EtOCH:CHCH(OEt)2 (XVII) to yield sym. methine dyes. 2,5-Cl2C6H3NO2 (96 g.) added at 50° to 71 g. pyrrolidine (XVIII), kept 15 min. at 50°, diluted with H2O, and filtered gave 102 g. N-(2-nitro-4-chlorophenyl)pyrrolidine (XIX), m. 73° (iso-PrOH). 2,5-F2C6H3NO2 (76.4 g.) added at 90° to 89 cc. XVIII, poured into H2O, and extracted with C6H6 yielded the 4-fluoro analog of XIX, m. 48° (iso-PrOH). XVIII (15.6 g.) added dropwise to 23 g. 4,3-Cl(O2N)C6H3CO2Et in 60 cc. refluxing absolute EtOH, refluxed 1 hr., poured into H2O, and filtered yielded the 4-CO2Et analog of XIX, m. 78°. 2,4,5-Cl(O2N)2C6H2CO2H (143 g.) and 140 cc. SOCl2 heated 3 hrs. on the water bath and evaporated, and the residue treated slowly with 220 cc. EtOH, poured into 2 l. H2O, and filtered yielded 2,4,5-Cl(O2N)2C6H2CO2Et (XX), m. 78° (EtOH). XX (55 g.) in 250 cc. MeOH added dropwise to 28.4 g. XVIII, heated 10 min. on the water bath, and filtered gave the N-[5,4,2-Cl(EtO2C)(O2N)C6H2] derivative of XVIII, m. 105°. 4,3-Cl(O2N)C6H3SO2Cl (102.4 g.) added dropwise at 50° to 148 cc. XVIII, heated 15 min. on the water bath, poured into H2O, and filtered

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yielded 2-pyrrolidino-5-(pyrrolidinosulfonyl)-1-nitrobenzene, m. 133° (iso-PrOH). 2,5-Br(F)C6H3NO2 (115 g.) and 109 cc. piperidine (XXI) heated 1.5 hrs. with stirring at 95°, dild. with H2O, and filtered gave the 2,4-F(O2N)C6H3 deriv. of XXI, m. 53° (iso-PrOH). 1-[4,2-Cl(H2N)C6H3] deriv. (82.4 g.) of XVIII (obtained by hydrogenation of XIX) in 625 cc. 2N HCl diazotized with 29.4 g. NaNO2 in 70 cc. H2O, poured into 35.3 g. NaN3 in 168 g. NaOAc in 650 cc. H2O, and filtered, the residue dissolved in 500 cc. PhNO2, added dropwise at. 170° to 500 cc. PhNO2, concd. in vacuo to about 100 cc., cooled, and filtered yielded 6-chloro-2,3-dihydro-1H-pyrrolo[1,2-a]benzimidazole (XXII), m. 137° (C6H6-hexane). By the method employed for the prepn. of XIX were prepd. the following N-aryl-substituted derivs. (XXIII) of XVIII and converted further by the method described for the prepn. of XXII to the following substituted derivs. of 2,3-dihydro-1H-pyrrolo[1,2-a]benzimidazole (XXIV)[N-aryl substituent of the XXIII used, m.p. or b.p./mm. of the XXIII, substituent(s) of the resulting deriv. of XXIV, and its m.p. given]: 6,2-Cl(O2N)C6H3, 134-6°/3, 8-Cl (XXV), 122°; 4,5,2-Cl2(O2N)C6H2, 80°, 6,7-di-Cl (XXVI), 215°; 4,2-F(O2N)C6H3, 48°, 6-F (XXVII), 128°; 4,2-Br(O2N)C6H3, 76°, 6-Br (XXVIII), 150°; 4,2-EtO2C(O2N)C6H3, 78°, 6·CO2Et, 134°; 6,2-EtO2C(O2N)C6H3, 53°, 8-CO2Et, 96°; 5,4,2-Cl(EtO2C)(O2N)C6H3, 105° (2-NH2 analog, m. 90°), 6-carbethoxy-7-chloro (XXIX), 138°; 4-pyrrolidinosulfonyl-2-nitrophenyl, 133° (2-NH2 analog, m. 174°), 6-pyrrolidinosulfonyl (XXX), 239°; 4,2-Me(O2N)C6H3, 60°, 6-Me (XXXI), 146°; 5,4,2-Br(EtO2C)(O2N)C6H2, 105° (2-NH2 analog, m. 95°), 6-carbethoxy-7-bromo (XXXIA), 114°. By the same methods were prepd. the following substituted derivs. of 1,2,3,4-tetrahydropyrido [1,2-a]benzimidazole (XXXII) via the corresponding N-aryl-substituted derivs. (XXXIII) of XXI [N-aryl substituent of the XXXIII used, m.p. of the XXXIII, substituent(s) of the resulting XXXII, and m.p. of the XXXII given]: 4,2-Cl(O2N)C6H3, --, 7-Cl (XXXIV), 151-3°; 4,2-F(O2N)C6H3, 53°, 7-F (XXXV), 110°; 4,5,2-Cl2(O2N)C6H3, --, 7,8-di-Cl (XXXVI), 184°; 4,2-Br(O2N)C6H3, --, 7-Br (XXXVII), 163°; 4,2-NC(O2N)C6H3, 112°, 7-CN (XXXVIII), 176°; 4-piperidinosulfonyl-2-nitrophenyl, 106° (2-NH2 analog, m. 139°), 7-piperidinosulfonyl (XXXIX), 229°; 4,2-F3C(O2N)C6H3, 55 (2-NH2 analog, m. 52°), 7-CF3 (XL), 140-1°; 5,2-Cl(O2N)C6H3, --, 8-Cl (XLI), --. By the method of Saunders (CA 50, 7797c) were prepd. the following substituted 3,4-dihydro-1H-[1,4]oxazino[4,3-a]benzimidazoles (XLII) from 3,4-dihydro-1H-1,4-oxazine via the appropriate N-aryl-substituted derivs. (XLIII) of XLII [N-aryl substituent of XLIII, m.p. of XLIII, substituent(s) of XLII, and m.p. of XLII given]: 4,2-Cl-(O2N)C6H3, --, 8-Cl (XLIV), --; 4,2-NC(O2N)C6H3, 130° (2-NH2 analog, m. 177°), 8-CN (XLV), 186°; 4,5,2-Cl2(O2N)C6H2, 75° (2-NH analog, m. 146°), 7,8-di-Cl (XLVI), 192°. XXVIII (19.1 g.) in 60 cc. concd. H2SO4 treated at 0-5° with 7.7 cc. HNO3 (d. 1.42) in 25 cc. concd. H2SO4, poured into H2O, basified with NH4OH, and filtered gave the 6-bromo-7-nitro (XLVII) deriv. of XXIV, m. 201° (EtOH). XLVII (15.2 g.) in MeOCH2CH2OH hydrogenated over Raney Ni yielded the 7-NH2 analog (XLVIII) of XLVII, m. 264° (EtOH). XLVIII (9.2 g.) in 30 cc. H2O and 9 cc. HCl diazotized with 2.5 g. NaNO2 in 15 cc. H2O, neutralized with Na2CO3, treated with stirring with 6.89 g. CuCN and 12.3 g. KCN in 100 cc. H2O, kept 0.5 hr. at room temp. and 15 min. at 50-60°, cooled, and filtered, and the residue

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sublimed at 200°/2 mm. yielded 6-bromo-7-cyano deriv. (XLIX) of XXIV, m. 224° (C6H6-hexane). 7-NH2 deriv. (L) (17.3 g.) of XXIV in 200 cc. 5N HCl diazotized with 7.2 g. NaNO2 in 30 cc. H2O, treated with 8 g. CuCl in 35 cc. concd. HCl at 50-60°, cooled, and filtered, and the residue in H2O treated with 25% NH4OH yielded the 7-Cl deriv. (LI) of XXIV, m. 136° (C6H6). L(43.6 g.) in 31% aq. HBF4 diazotized with 18.5 g. NaNO2 in ,50 cc. H2O, and neutralized with cooling with Na2CO3 yielded the diazonium fluoroborate analog (LII) of L, m. 170-80° (decompn.). LII added to refluxing 250 cc. Tetralin until the BF3 evolution ceased and evapd., the residue extd. with warm 2N HCl, the ext. basified with Na2CO3 and extd. with CHCl3, and the CHCl3 ext. distd. gave the 7-F deriv. (LIII) of XXIV, m. 124°, b3 166°. Similarly were prepd. by these methods the following substituted derivs. of XXIV from the corresponding 7-NO2 (LIV) via the 7-NH2 derivs. (LV) [substituent of LIV and LV, m. ps. of LIV and LV, and substituent(s) and m.p. of the resulting deriv. of XXIV given]: 6-Cl, 203°, 264°, 6-chloro-7-cyano (LVI), 215°; 6-F, 236°, 230°, 6-fluoro-7-cyano (LVII), 210°; none, --, --, 7-CN (LVIII), 155°. In the same manner were prepd. the following substituted XXXII [substituent and m.ps. of the 7-NO2 and 7-NH2 analogs of the resulting XXXII, and substituent(s) and m.p. of the XXXII given]: 6-Br, 184°, 217°, 7-bromo-8-cyano (LVIIIA), 210°; 6-Cl, 194°, 210°, 7-chloro-8-cyano (LIX), 212°; 6-F, 264°, 199°, 7-fluoro-8-cyano (LX), 253°; none, --, --, 8-CN (LXI), 194°. In the same manner was prepd. 7-cyano-8-chloro-3,4-dihydro-1H-[1,4]oxazino[4,3-a]benzimidazole (LXII), m. 300°, from the 7-NO2 analog, m. 220°, via the 7-NH2 analog, m. 264°. 6-CO2Et deriv. (LXIII) (5 g.) of XXIV in 15 cc. EtOH and 25 cc. 2.5N NaOH refluxed 5 min., cooled, acidified with AcOH, and filtered yielded the 6-CO2H deriv. (LXIV) of XXIV, m. 300°. Similarly were obtained the following derivs. of XXIV [substituent(s) and m.p. given]: 8-CO2H (LXIVA) 310-12°, 6-carboxy-7-chloro (LXV), >270°. L(8.65 g.) in 50 cc. C6H6 treated dropwise with Ac2O, refluxed 15 min., cooled, and filtered yielded 7.3 g. 7-AcNH deriv. (LXVI) of XXIV, m. 260-2° (EtOH). CuCl (18.6 g.) added to 40.3 g. 6-Br deriv. of XXIV in 200 cc. PhNO2, refluxed 1.5 hrs., cooled to 100°, treated with shaking with 34 g. NaCN in 100 cc. H2O, and dild. with 40 cc. H2O and 40 cc. CHCl3, and the org. phase worked up yielded 6-CN deriv. of XXIV, m. 190° (EtOH). 3,6-Dihydro-4,5-benzo-2-pyrone (24.8 g.) and 18.1 g. o-C6H4(NH2)2 heated 15 hrs. at 250° under pressure and distd. yielded 6,11-dihydrobenzimidazolo[1,2-b]isoquinoline (LXVII), m. 202° (EtOAc). XXIV (6.3 g.) and 5.7 g. MeI in 15 cc. Me2CO refluxed 0.5 hr., cooled, and filtered gave XXIV.MeI, m. 220°. XXIV (16 g.) and 23.5 g. EtI heated 15 hrs. at 110° under pressure gave XXIV.EtI, m. 198°. XXX (3.4 g.) and 1.2 cc. MeI heated 16 hrs. under pressure at 95° gave XXX.MeI, m. >270°. XXXIV (6.2 g.) and 6.2 g. EtI heated 1.5 hrs. at 110° yielded XXXIV.EtI, m. >250°. XLIV (10.4 g.) and 10 g. EtI heated 16 hrs. at 110° yielded XLIV EtI, m. 186°.
8-Aminopyrido[1,2-a]benzimidazole (LXVIII) (8.8 g.) in 80 cc. 5N HCl diazotized with 3.7 g. NaNO2 in 10 cc. H2O, poured into a CuCl soln., filtered, basified with NH4OH, and filtered yielded the 8-Cl analog (LXIX)

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(R, R' = Et, A = CHCH:CH, X = H), m. 197° (596, --, 640 AgCl); the nos. given in parentheses after the m.p. throughout this abstr. are the absorption max. and the log ε value of the resp. compd. and the absorption max. of an AgCl, AgCl-AgBr, or AgBr-AgI photographic emulsion sensitized with the compd.). XXX.MeI (4.9 g.) in 25 cc. PhNO2 refluxed 2 hrs. with 3.5 cc. HC(OEt)3, cooled, and filtered yielded LXXIII (R and R' = Me, A = CH, X = pyrrolidinosulfonyl), m. above 320° (530, 5.32, 575 AgCl). Similarly were prepd. by treatment with HC(OEt)3 dyes from the following quaternary salts (m.p. and, in parentheses, absorption data of the resulting dye given): XLIV.EtI, 238° (528, --, 590 AgCl): LXIII.MeI, 260° (532, --, 575 AgCl); LXXI.III, 220-4° (537, 4.97, 590 AgCl); IX (3.1 g.) and 3.1 g. LVIII.III in 20 cc. Ac2O treated with 2.8 cc. Et3N, refluxed 15-min., cooled, dild. with Et2O, and filtered and the residue treated with NaClO4 gave LXXIV (R = Et, R' = CH2CH2OAc, X and X'' = H, X' = CN, Z = S, An = ClO4), m. 175° (476, 5.12, 520 AgCl-AgBr). XLIX.EtI (2.1 g.), 1.6 g. IX, and 25 cc. Ac2O refluxed 2 hrs. with 1.4 cc. Et3N, cooled, and filtered gave LXXIV (R and R' = Et, X = Br, X' = CN, X'' = H, Z = S, An = I), m. >260°, (MeOH)(480, 5.135, 540 AgBr-AgI). Similarly were prepd. dyes from the following quaternary salts (same data given): XXIV.EtI, >250° (462, 5.03, 500 AgCl-AgBr); XLIX.EtI, 302° (474, 5.09, 520 AgCl-AgBr); XXXVIII.EtI, 270° (474, 5,034, 520 AgCl-AgBr); XXXI.EtI, >260° (472, 5.01, 525 AgCl-AgBr); LIX.EtI, >250° (480, 5.18, 540 AgCl-AgI); LX.EtI, >250° (480, 5.10, 540 AgBr-AgI); XLIV.EtI, 240° (483, 4.95, 520 AgCl-AgBr); XLV.EtI, >250° (500, 5.058, 540 AgCl); XXIV.EtI, >250° (454, 4.95, 490 AgCl-AgBr); LI.EtI, >250° (465, 5.03, 510 AgCl); XXV.EtI, 291-2° (462, 4.962, 515 AgCl); XXVI.EtI, >260° (468, 5.206, 519 AgCl); XXXII.EtI, >260° (458, 4.991, 500 AgCl-AgBr); LXIII.EtI, >260° (466, 5.088, 520 AgCl-AgBr); LI.MeI, >270° (468, 5.030, 505 AgCl); LXIVA.MeI, >270° (470, 5.006, 500 AgCl); XXXIX.IV, >260° (474, 5.025, 520 AgCl-AgBr); XXIX.V, >260° (480, 5.075, 520 AgCl-AgBr); XXIX.VII, >260° (477, 4.917, 520 AgCl-AgBr); XXX.MeI, <250° (468, 5.009, 510 AgCl-AgBr); LXIXA.EtI, >250° (478, 5.14, 525 AgCl-AgBr); XXVII.EtI, >250° (458, 4.95, 500 AgCl-AgBr); XXXIV.EtI, 240° (466, 4.91, 510 AgCl-AgBr); XXXVI.EtI, >260° (570, 5.241, 520 AgCl-AgBr); XXXVI.V, >260° (461, --, 515 AgCl-AgBr); XXXVII.EtI, >260° (468, 4.982, 500 AgCl-AgBr); XXXIX.EtI, >250° (472, 5.155, 520 AgCl); XXXI.EtI, >260° (458, 4.93, 490 (AgCl-AgBr); LXXI.EtI, 281° (474, 5.068, 520 AgCl-AgBr); LXV.MeI, >250° (470, 5.104, 505 AgCl); LVIII.EtI, 292° (480, 5.111, 5.15 AgCl); XXXIA.IV, >250° (474, 5.070, 520 AgCl); XXXIA.V, >260° (479, 5.006, 520 AgCl-AgBr); XXXIA.VII, > 260° (479, 4.985, 520 AgCl-AgBr); XL.MeI, 256° (466, 5.014, 500 AgCl-AgBr); XL.EtI, 260° (467, 5.84, 500 AgCl-AgBr); XLIX.EtI, >260° (478, 5.13, 525 AgCl). XXV.EtI (4.35 g.) and 5.60 g. X in 30 cc. Ac2O refluxed 5 min. with 3.2 cc. Et3N and cooled gave LXXIV (R and R' = Et, X and X' = H, X'' = Cl, Z = Se, An = I), m. 285° (EtOH) (462, 5.13, 500 AgCl-AgBr).
XII (2.8 g.) and 3.15 g. XXIV.EtI in 30 cc. Ac2O refluxed 45 min. with 2.8 cc. Et3N, cooled, and dild. with Et2O, and the ppt. treated with NaClO4 yielded LXXV (R and R' = Et, X = Me, X', Y, and Y' = H,Z = O, An = ClO4), m. >250° (470, 4.99, 510 AgCl-AgBr). Similarly were prepd. dyes

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of LXVIII, m. 207°. LXIX (2 g.) and 1.7 g. EtI heated 15 hrs. at 110° gave LXIX.EtI,m. >250°. LXIX.EtI (3 g.) in MeOCH2CH2OH hydrogenated at 80° over Raney Ni gave XLI.EtI, m. 250°. L (8.6 g.) in 50 cc. MeOH treated dropwise with 4 cc. MeI and refluxed 15 min. gave L.MeI, m. 282°. 4-Hydroxy-6-cyano deriv. (4 g.) of XXIV in 40 cc. Ac2O refluxed 10 min. and dild. with Et2O pptd. the 4-acetoxy-6-cyano deriv. of XXIV, m. 208°. The following quaternary salts were prepd. in Me2CO (except where another solvent is indicated in parentheses) (starting tertiary base and alkyl halide used, reaction time in hrs., reaction temp., and m.p. of the resulting quaternary ammonium salt given): XXIV, III, 6, 105°, 180°; 2,3-dihydro-1H-pyrrolo [1,2-a]naphtho[2,3-d]imidazole (LXIXA), EtI, 24, 110°, 250; XXII, EtI, 15, 110°, 242°; XXV, EtI, 3.5, 105-10°, 238°; XXVI, EtI, 16, 110°, >250°; XXVI, III, 4, 110°, >250°; XXVI, IV, 4, 140°, 252°; XXVI, V, 4, 140°, >260°; XXVII, EtI, 16, 110°, 237°; XXVIII, EtI, 15, 110°, 250°; LXIII, MeI, 3, 90°, 238°; 8-CO2Et deriv. (LXX) of XXIV, MeI, 3.5, 90°, 190°; XXIX, MeI, 2, 95°, 250°; XXIX, VI, 3, 125°, 192°; XXIX, VII, 2, 120°, 140-5°; XXIX, IV, 4 (in MeNO2), 120°, --; XXIX, V, 2, 120°, 120-5°; XXX, MeI, 6, 95°, >270°; XXX, EtI, 16, 105°, 220°; XXXI, EtI, 8 (in MeNO2), 100°, 202°; XXXIA, III, 2, --; XXXIA, VII, 2, 120°, --; XXXIA, IV, 2, 120°, 100°; XXXIA, V, 1, 120°, >250°; L, MeI, 0.25, -- (at reflux)(in MeOH), 282°; XLIX, EtI, 16, 110°, > 250°; LVI, EtI, 16, 110°, >250°; LVII, EtI, 16, 110°, 280°; LVIII, III, 3, 105°, 246°; LI, EtI, 5.5, 110°, 238°; LIII, EtI, 15, 110°, 210°; LXIV, MeI, 15, 100°, 304°; LXIVA, MeI, 16, 125°, 265°; LXV, MeI, 17, 125°, 270-2°; LXVI, EtI, 16, 110°, 230°; 6-CN deriv. (LXXI) of XXIV, EtI, 16, 105°, >250°; LXXI, III, 15 (in MeNO2), 125°, 207-9°; LXXI, V, 3 (in MeNO2), 125°, 200°; XXXII, MeI, 0.5, -- (at reflux), 210°; XXXII, EtI, 15, 110°, 246°; XXXII, VII, 3, -- (at reflux), 260°; XXXII, AcNHSO2(CH2)3. Br, 3, -- (at reflux), >260°; XXXII, IV, 4, -- (at reflux), 206-8°; XXXII, V, 5, -- (at reflux), 238°; XXXIV, EtI, 15, 110°, >250°; XXXIV, III, 16, 120°, 228°; XXXIV, VII, 2, 120°, >260°; XXXV, EtI, 15, 110°, >250°; XXXVI, III, 4, 110°, >250°; XXXVI, V, 3, -- (at reflux). >260°; XXXVII, EtI, 15, 110°, >250°; XXXVIII, EtI, 15, 100°, 306°; XXXIX, EtI, 15, 110°, >250°; XL, EtI, 3 (in MeNO2), 100°, 260°; XL, MeI, 1.5, -- (at reflux), 270°; XLI, EtI, 15, 110°, 250°; LVIIIA, EtI, 16, 110°, >300°; LIX, EtI, 15, 110°, >250°; LX, EtI, 15, 110°, >250°; LXI, EtI, 15, 110°, >260°; LXVII, MeI, 4, 95, 260°; 1,2,3,4,8,9,10,11-octa-hydrodipyrido[1,2-a:1',2'-a']benzo[1,2-d:5,4-d']diimidazole (LXXII), 2EtI, 16, 110°, >260°; XLIV, EtI, 16, 110°, 186°; XLV, EtI, 15, 100, 200-10°; XLVI, 16, 110°, 202-5°; LXII, MeI, 4, 110°, 170°; LXII, EtI, 16, 110°, --. XXIV.EtI (6.3 g.), 7 cc. XVII, and 20 cc. PhNO2 refluxed 5 min., cooled, and filtered gave LXXIII from the following quaternary salts with the 5,6-di-Me deriv. of XI (same data given): XXIX.MeI, >310° (490, 5.22, 540 AgCl); XXX.MeI (with XII), 295° (486, 5.205, 520 AgCl-AgBr); LXIV.MeI, >270° (486, 5.194, 520 AgCl); LXIVA.MeI, >270° (492, 5.153, 535 AgCl); XLV.EtI, 302-4° (520, 5.158, 560 AgCl-AgBr); LXXI.EtI, 285° (496, 5.218, 540 AgCl-AgBr); LXV.MeI, >270° (492, 5.273, 530 AgCl). XII (5.6 g.) and 5.6 g. XXIV.III in 50 cc. Ac2O treated with stirring with 5.6 cc. Et3N, stirred 2 hrs. at room temp. and 15 min. at reflux, cooled, and dild. with Et2O, and the ppt. treated with NaClO4 yielded LXXV (R = Et, R' = CH2CH2OAc, X = Me, X', Y, and Y' = H, Z = O, An = ClO4), m. >250° (474, 5.07, 540 AgBr-AgI). LVIII.III gave similarly a dye, m. 220° (4.92, 5.12, 520 AgCl-AgBr). 5,6-Di-Me deriv. (LXXVI)(2.9 g.) of XI and 3.15 g. XXIV.EtI in 30 cc. Ac2O treated with stirring with 2.8 cc. Et3N, stirred 1 hr. at room temp. and 15 min. at reflu, and dild. with Et2O pptd. LXXV (R and R' = Et, X and X' = Me, Y and Y' = H, Z = O, An = I), m. 169° (EtOH) (476, 5.08, 510 AgCl-AgBr). Similarly were prepd. dyes from the following quaternary salts (same data given): XLIX.EtI, >260° (498, 5.281, 540 AgCl-AgBr); LXX.MeI, >270° (492, 5.125, 540 AgCl); LXIXA.EtI, >250° (498, 5.37, 545 AgCl); XXXIV.EtI (with XII), >250° (480, 5.10, 525 AgCl); XXXVI.EtI, >250° (492, 5.14, 540 AgCl); LI.EtI (with XII), >250° (478, 5.18, 520 AgCl-AgBr); XXII.EtI with XII, >250° (478, --, 520 AgCl-AgBr); XXVI.EtI, >260° (494, 5.163, 520 AgCl-AgBr); XXVII.EtI, >260° (484, 5.156, 520 AgCl-AgBr); LIII.EtI (with XII), >250° (472, 5.08, 520 AgCl-AgBr); LXIII.MeI, >270° (488, 5.207, 540 AgCl); XXV.EtI (with XII), >250° (494, 5.25, 540 AgCl); XXXV.EtI, >260° (480, 4.926, 520 AgCl-AgBr); XXXVI.EtI, >250° (492, 5.14, 545 AgCl-AgBr); XLV.EtI, >260° (506, 4.976, 520 AgCl-AgBr); LXVII.MeI, 275° (477, 4.925, 540 AgCl); LXXI.III, >260° (501, 5.184, 555 AgCl); XLVI.EtI, >260° (516, 5.157, 580 AgCl-AgBr); XXXVII.EtI (with XII), >250° (480 --, --, --). XIV (6.8 g.), 3.9 g. XXIV.EtI, 30 cc. C5H5N, and 3.5 cc. Et3N refluxed 2 hrs. and dild. with Et2O gave LXXV (R and R' = Et, X, and X' = Cl, Y and Y' = H, Z = NEt, An = I), m. >250° (aq. MeOCH2CH2OH) (504, 5.20, 560 AgCl). Similarly were prepd. dyes from the following quaternary salts (same data given): XXII.EtI [with 1,3-diethyl-5-chloro analog (XIVA) of XIV], 240° (502, 5.30, 580 AgCl-AgBr); XXVII.EtI (with XIVA), >260° (500, 5.24, 535 AgCl); LIII.EtI [with 1,3-diethyl-5-cyano analog (XIVB) of XIV], >250° (500, 5.15, 540 AgCl); LVIII (with XIVB), >250° (512, 5.32, 560 AgCl); XXXIV.EtI, 200° (508, 4.91, 570 AgCl); XXXV.EtI (with XIVA), 230° (500, --, 570 AgCl); XXXIX.EtI, 286° (514, 5.41, 580 AgCl); XXXVI.III, >260° (528, 5.16, 614 AgCl); LXX.EtI (with XIVA), >260° (508, 5.16, 580 AgCl); XLIV.EtI, >260° (533, 5.29, 615 AgCl); LXXI.V (with XIVB), >250° (515, 5.331, 560 AgCl). XIV (2.5 g.), 1.5 g. LI.EtI, 10 cc. PhNO2, and 1.2 cc. Et3N refluxed 15 min., cooled, and dild. with Et2O pptd. LXXV (R and R' = Et, X, X', and Y = Cl, Y' = H, Z = NEt, An = I), m. 250° (EtOH)(506, 5.24, 575 AgCl). Similarly were prepd. dyes from the following quaternary salts (same data given): XXVI.III, 260° (516, 4.85, 580 AgCl); XXVI.EtI, >260° (510, 5.481, 580 AgCl); LVIII.III, >250° (512, 5.39, 560 AgCl); LXVI.EtI, 260° (506, --, 540 AgCl); LI.EtI, >250° (504, 5.38, 570-80 AgCl); LIII.EtI [with XIVA], >250° (504, 5.22, 570 AgCl); LVIII.EtI, >250° (510, 5.35, 600 AgCl); XLIXA.EtI, >250° (517, 5.48, 595 AgCl); XXXVI.IV, >260° (516, 5.298, 590 AgCl); XXXIV.EtI (with XIVA), >250° (507, 5.15, 540-575 AgCl); XXXVI.EtI, >250° (515, 5.37, 580 AgCl); XXXVI.EtI (with XIVA), >250°

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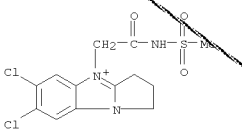
(512, 5.13, 580 AgCl); XXXII.VII, >260° (515, 4.937, 580 AgCl); L.MeI, -- (--, --, 580). XL.EtI (3.8 g.), 3.3 g. benzoselenazole analog of XI, 25 cc. Ac2O, and 1.4 cc. Et3N heated 5 min. at 60°, cooled, and filtered gave LXXVII (R = Et,R' = Me, X,X',and Y' = H, Y = CF3, Z = Se, An = I), m. 268° (MeOCH2CH2OH) (512, 5.024, 560 AgBr-AgCl). XXIX.MeI (4.06 g.) and 3.55 g. VIII in 60 cc. abs. refluxing EtOH treated dropwise with 1.4 cc Et3N, refluxed 20 min., cooled, and filtered gave LXXV (R = Et,R' = Me,X = CO2Et, X' = Cl,X'' = H,S = S, An = I), m. >270° (MeOH)(470, 5.145, 520 (AgCl-AgBr). Similarly were prepd. dyes from the following quaternary salts (same data given): XLVI.EtI, >260° (495, 5.048, 540 AgCl-AgBr); LXII.MeI, >260° (500, 4.793, 550 AgCl-AgBr). LXVII.MeI (3.62 g.), 3.55 g. VIII, 25 cc. HCCNMe2, and 1.4 cc. Et3N refluxed 5 min., cooled, filtered, dild. with EtO2, and filtered again yielded LXXVII, m. 275° (EtOH) (456, 4.796, 520 AgCl-AgBr). XXV.EtI (4.9 g.) and 4.9 g. XI in 30 cc. Ac2O refluxed 3 min. with 3.2 cc. Ec3N, cooled, and filtered gave LXXV (R and R' = Et, X, X', and Y = H, Y' = Cl, Z = Se, An = I), m. 290° (HCONMe2) (506, 5.01, 555 AgBr-AgI). XXXVI.V (4.56 g.), 3.4 g. XIII, 40 cc. HCONMe2, and 1.4 cc. Et3N refluxed 10 sec., treated with 5 cc. Ac2O, refluxed 4 min., cooled, and filtered yielded LXXVII (R = Et, R' = MeSO2N-COCH2, X = Ph, X' = H, Y' and Y' = Cl, Z = O, no An (R' is charged), m. >260° (PhOH-EtOH)(495, 4.950, 555 AgCl-AgBr). LXVII.MeI (2.75 g.), 1.81 g. XIV, 75 cc. MeOH, and 3.4 cc. Et2N refluxed 5 min., cooled, and filtered yielded LXXVII (R = Et, R' = Me, X and X' = Cl, Y and Y' = H, Z = NEt, An = I), m. >270° (MeOCH2CH2OH) (502, 4.960, 570 AgCl). LXXII.2EtI (1.73 g.), 1.9 g. IX, 20 cc. Ac2O, and 1.7 cc. Et3N refluxed 45 min., cooled, and dild. with Et2O pptd. LXXIX, m. >320° (EtOH) (548, 5.30, 595 AgCl-AgBr). XXII.EtI (3.5 g.), 3.1 g. XV, 25 cc. Ac2O, and 2.8 cc. Et3N, cooled, and dild. with H2O pptd. LXXX (R and R' = Et, X = Cl, Z = S, A = CH), m. 294° (MeOCH2CH2OH)(524, 4.95, 590 AgCl). Similarly were prepd. dyes from the following quaternary salts (same data given): XXIV.MeI, 265-7° (516-488, 4.57-4.49, 570 AgCl); XXVII.EtI, 276-8° (520, 4.98, 570 (AgCl); XXVIII.EtI, 260° (524, 5.01, 575 AgCl); XXVI.MeI, 262-3° (521, 5.02,570 AgCl); XXXVI.EtI, 280° (528, 5.16, 585 AgCl); XXXV.EtI, 164-5° (522, --, 580 AgCl); XXXIX.EtI, 278° (528, 1.154,580 AgCl); XLIV.EtI, 305° (548, 4.92, 600 AgCl); LXIII.MeI, >270° (536, 5.231, 590 AgCl); LXVII.MeI, 260° (518, 4.832, 570 AgCl); XLVI.EtI, >260°, (552, 4.745, 605 AgCl); XXXIV.EtI, 244° (526, 4.96, 580 AgCl). XXIV.EtI (3,14 g.), 2.9 g. XV, 25 cc. Me Carbitol, and 2.8 cc. Et3N refluxed 20 min., cooled, and dild. with H2O pptd. LXXX (R and R' = Et, X = H, Z = O, A = CH), m. 160° (1:1: EtOH-Me Carbitol) (498, 4.332, 550 AgCl). XXXIV.EtI gave similarly a dye, m. 192° (522, --, 575 AgCl).

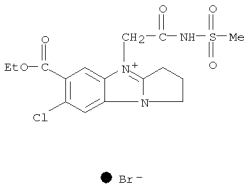
2-Thio-3-ethyl-5-[4-(5-ethyl-7-chloro-1,2,3,4-tetrahydropyrido[1,2-a]benzimidazolyl)-methylene]-2,4-thiazolidinedione (1.8 g.) in 150 cc. dry C6H6 refluxed 4 hrs. with 0.58 cc. Me2SO4, cooled, and filtered, the resulting LXXXII (R = MeS) (1.7 g.), 0.6 g. 3-ethyl-2-thio-2,4-thiazolidinedione, 20 cc. C5H5N, and 0.5 cc. Et3N refluxed 2-3 min., dild. with 15 cc. C5H5N, cooled, and filtered, and the residue recrystd. successively from C5H5N, HCONMe2-PrOH, and MeOCH2CH2OH gave LXXXIII, m. >260° (592, 5.124, 650 AgCl-Ag-Br). LXXXII (R = MeS) (0.53 g.), 0.6 g. LXXXIII, 0.31 g. 2,5-dimethyl-3-ethylbenzothiazolium methosulfate, 15 cc. C5H5N, and 0.14 cc. Et3N refluxed 2.3 min., cooled, and filtered gave LXXXII (R = 5-methyl-3-ethyl-2-benzothiazolylidenemethyl), m. >260° (MeOCH2CH2OH)(605, 4.943, 640 AgCl-AgBr). XVI (3.32 g.) and 3.625 g. XXXIV.EtI in 70 cc. refluxing Me2SO treated with 1.4 cc. Et3N, heated 2 hrs. at 90°, cooled, dild. with 210 cc. H2O, refrigerated overnight, and filtered gave LXXX (R and R' = Et, X = Cl, Z = S, A = CHCH:CH), decomp. on heating (EtOH) (615 , --, 670 (AgCl-AgBr). LXXXII.2EtI (2.89 g.) in refluxing 80 cc. Me2SO treated with 3.06 g. XV and 2.8 cc. Et3N, heated 3 hrs. at 95° while being treated with an addnl. 1.4 cc. Et3N during 2 hrs., dild. with 100 cc. MeOH, and filtered gave LXXXIV, m. >260° (PhOH-MeOH)(620, 5.460, 645 AgCl). p-Me2NC6H4CHO (1.5 g.) and 3.14 g. XXIV.EtI in Ac2O treated with 2.8 cc. Et3N, refluxed 15 min., cooled, and filtered gave the 3-(p-dimethylaminobenzylidene) deriv. of XXIV.EtI, m. 270° (EtOH) (429, 4.13, 430-485 AgCl). XXVI.IV (4.85 g.) in 125 cc. Me Carbitol treated with 4.49 g. X and 2.8 cc. Et3N, heated 10 min. at 100% cooled, dild. with 200 cc. Et2O. and decanted, and the residue recrystd. from HCONMe2 gave LXXIV (R = Et, R' = AcNHSO2(CH2)4, X and X' = Cl, X'' = H, Z = Se, An = I). XXVI.V gave similarly a dye, m. >260° (477, --, 525 AgCl-AgBr). XXVI.V treated similarly with VIII yielded a dye, m. >260° (472, --, 560 AgCl-AgBr). XXVI.IV treated in the same manner with VIII gave a dye, m. >240° (470, -- 520 AgCl-AgBr).

IT 59504-84-6P, 1H-Pyrrolo[1,2-a]benzimidazolium, 6,7-dichloro-2,3-dihydro-4-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide 59504-92-6P, 1H-Pyrrolo[1,2-a]benzimidazolium, 7-chloro-6-(ethoxycarbonyl)-2,3-dihydro-4-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide 59504-99-3P, 1H-Pyrrolo[1,2-a]benzimidazolium, 7-bromo-6-(ethoxycarbonyl)-2,3-dihydro-4-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide 59505-22-5P, Pyrido[1,2-a]benzimidazolium, 7,8-dichloro-1,2,3,4-tetrahydro-5-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide 59505-69-0P, 1H-Pyrrolo[1,2-a]benzimidazolium, 7-chloro-6-(ethoxycarbonyl)-3-[(3-ethyl-2-thiazolidinylidene)ethylidene]-2,3-dihydro-4-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt 59505-84-9P, 1H-Pyrrolo[1,2-a]benzimidazolium, 7-bromo-6-(ethoxycarbonyl)-3-[(3-ethyl-2-thiazolidinylidene)ethylidene]-2,3-dihydro-4-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt 59506-52-4P, Pyrido[1,2-a]benzimidazolium, 7,8-dichloro-4-[(3-ethyl-5-phenyl-2(3H)-benzoxazolylidene)ethylidene]-1,2,3,4-tetrahydro-5-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt 100260-61-5P, 6,7-Dichloro-4-[2-(3-ethyl-2-thiazolidinylidene)ethylidene]-1,2,3,4-tetrahydro-5-[[(methylsulfonyl)carbamoyl]methyl]pyrido[1,2-a]benzimidazolium hydroxide, inner salt 106884-83-7P, 6,7-Dichloro-3-[2-(3-ethyl-2-selenazolinylidene)ethylidene]-2,3-dihydro-4-[[(methylsulfonyl)carbamoyl]methyl]-1H-pyrrolo[1,2-a]benzimidazolium hydroxide, inner salt
RL: PREP (Preparation)
(prepn. of)

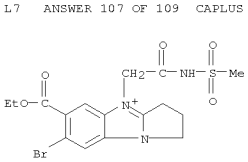
RN 59504-84-6 CAPLUS
CN 1H-Pyrrolo[1,2-a]benzimidazolium, 6,7-dichloro-2,3-dihydro-4-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)



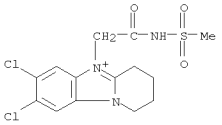
RN 59504-92-6 CAPLUS
CN 1H-Pyrrolo[1,2-a]benzimidazolium, 7-chloro-6-(ethoxycarbonyl)-2,3-dihydro-4-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)



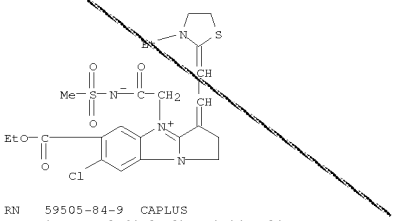
RN 59504-99-3 CAPLUS
CN 1H-Pyrrolo[1,2-a]benzimidazolium, 7-bromo-6-(ethoxycarbonyl)-2,3-dihydro-4-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)



RN 59505-22-5 CAPLUS
CN Pyrido[1,2-a]benzimidazolium, 7,8-dichloro-1,2,3,4-tetrahydro-5-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)



RN 59505-69-0 CAPLUS
CN 1H-Pyrrolo[1,2-a]benzimidazolium, 7-chloro-6-(ethoxycarbonyl)-3-[2-(3-ethyl-2-thiazolidinylidene)ethylidene]-2,3-dihydro-4-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)



RN 59505-84-9 CAPLUS
CN 1H-Pyrrolo[1,2-a]benzimidazolium, 7-bromo-6-(ethoxycarbonyl)-3-[2-(3-ethyl-

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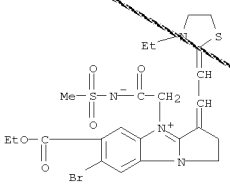
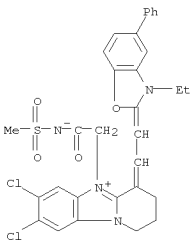
2-thiazolidinylidene)ethylidene]-2,3-dihydro-4-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

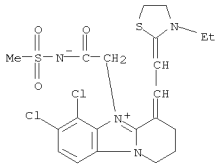


RN 59506-52-4 CAPLUS
CN Pyrido[1,2-a]benzimidazolium, 7,8-dichloro-4-[2-(3-ethyl-5-phenyl-2(3H)-benzoxazolylidene)ethylidene]-1,2,3,4-tetrahydro-5-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

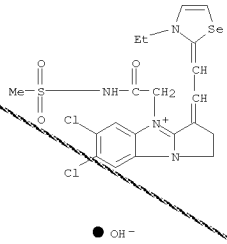


RN 100260-61-5 CAPLUS
CN Pyrido[1,2-a]benzimidazolium, 6,7-dichloro-4-[2-(3-ethyl-2-thiazolidinylidene)ethylidene]-1,2,3,4-tetrahydro-5-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (CA INDEX NAME)

L7 ANSWER 107 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 106884-83-7 CAPLUS
CN 1H-Pyrrolo[1,2-a]benzimidazolium, 6,7-dichloro-3-[2-(3-ethyl-2(3H)-selenazolylidene)ethylidene]-2,3-dihydro-4-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, hydroxide (1:1) (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L7 ANSWER 108 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1962:401934 CAPLUS
DOCUMENT NUMBER: 57:1934
ORIGINAL REFERENCE NO.: 57:328g-i,329a-i,330a-i,331a-f
TITLE: Sensitization of photographic silver halide emulsions
INVENTOR(S): Nys, Jean; Depoorter, Henri
PATENT ASSIGNEE(S): Gevaert Photo-Producten N.V.
SOURCE: 17 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1081311		19600505	DE 1958-G24862	19580704
<--				
GB 904332			GB	
US 3282933		19661101	US 1960-76525	19601219
<--				
PRIORITY APPLN. INFO.:			GB	19570705
<--				

AB The preparation is described of polymethine photog. sensitizers which contain at least 1 heterocyclic N atom and an organic group of the type AWNHXY or AWNXY, where A is a hydrocarbon radical, W and X are SO2 or CO or single bonds, at least 1 W or X is SO2, and Y is a hydrocarbon radical, a substituted amino group, or (if X is not CO or SO2) a 14 atom. The absorption maximum of a dye, the upper limit of sensitization by the dye of a photog. emulsion layer, and the absorption maximum of the sensitized Ag halide emulsion are given in mμ in parentheses together with the dye throughout this abstract Powdered Br(CH2)3SO3Na (275 g.) added with cooling and stirring slowly to 276 g. PCl5, kept 1 h. at room temperature, heated 2 h. at 70 80°, cooled, poured with stirring onto 700 g. ice, stirred some time, and extracted with Et2O yielded Br(CH2)3SO2Cl (I), b2 98°. 1 (25 g.) in 250 cc. dry Et2O treated with stirring at 0° with dry NH3 gave Br(CH2)3SO2NH2 (II), m. 60° (C6H6-petr. ether). II (7 g.) and 5.2 cc. Ac2O heated 1 h. on a water bath, cooled, and filtered gave Br(CH2)3SO2NHAc, m. 93°. EtNH2 (4 g.) in 10 cc. dry Et2O added dropwise with stirring to 9.5 g. Br(CH2)4SO2Cl (III) in 100 cc. dry Et2O at 0°, filtered, and worked up gave Br(CH2)4SO2NHEt, m. 33-5° (C6H6-petr. ether). MeSO2NH2 (IV) (4 g.) in 20 cc. H2O treated dropwise at 5° with stirring with 16.8 cc. 5N NaOH and 9 g. I during 3 h. at pH 8, stirred 20 min., acidified with 4.2 cc. concentrated HCl, and evaporated, and the residue extracted with Me2CO gave from the extract Br(CH2)3SO2NHSO2Me, m. 72°. IV (72 g.) and 208 g. BrCH2COCl heated 1 h. at 100° gave BrCH2CONHSO2Me, m. 110° (C6H6). EtSO2NH2 (4.8 g.), 12 g. BrCH2COCl, and 25 cc. dry C6H6 refluxed 3 h., cooled, and diluted with petr. ether gave BrCH2CONHSO2Et, m. 104° (C6H6). BrCH2CH2NH2.HBr (51 g.) in 100 cc. C5H5N treated at 5-10o dropwise with MeSO2Cl, cooled, filtered, and evaporated, and the residual oil extracted with Me2CO gave MeSO2NHCH2CH2Br, m. 49°. III (23.,5 g.) in 100 cc. dry dioxane treated with stirring at 0° with 6.4 cc. N2H4, stirred 1 h. at 0° filtered, and evapd. yielded oily Br(CH2)4SO2NHNH2 (V). V (31.7 g.) treated gradually with 31.7 cc. Ac2O, kept several days, heated 1 h. on the water bath, and cooled gave Br(CH2)4SO2NHNAc2 m. 116° (C6H6-hexane). Me2 NSO2NH2 (186 g.), 409 g. BrCH2COCl, and 2 l. dry C6H6 refluxed 10-15 h., filtered, cooled, and dild. with 3 l. hexane gave BrCH2CONHSO2Me2, m. 84°. 2-(2-Acetylanilinovinyl)-3-ethylbenzoxazolium iodide (Va) (1.45 g.), 1 g. 2,4-dimethyl-3-(3-sulfamoylpropyl)thiazolium bromide, 15 co. C5H5N, and 1 cc. Et3N heated 10 min. on a water bath and poured into Et2O pptd. [2-(3-ethylbenzoxazole)][2-[3(3 - sulfamoylpropyl) - 4 - methylthiazole]] trimethinecyanine iodide (VI) (517, 600, 550). 1-(2-Methylsulfonylaminoethyl)quinolinium bromide (2.6 g.) and 2.3 g. 2-methylthio3-methylbenzothiazolium toluenesulfonate gave similarly [2-[1-(2-methylsulfonylaminoethyl)quinoline]] [2-(3-methylbenzothiazole)]monomethinecyanine bromide (486, 560, 540), and 4.07 g. 2,6-dimethyl-3-(3-acetylsulfamoylpropyl)benzothiazolium bromide and 2.6 g. 1-phenyl-3-methyl-4(α-ethylthioethylidene)-5-pyrazolone yielded [2-[3-(3-acetylsulfamoylpropyl)-6 - methylbenzothiazole]] [4 - (1-Ph - 3-methyl-5-pyrazolone)]-α-dimethinemerocyanine (492, 620, 540). 2-Methylthio-3- methylnaphtho [1',2',4,5] thiazolium methosulfate (VII) (1.8 g.) and 1.8 g. 2-methyl-3-(4acetylsulfamoylbutyl)benzothiazolium bromide (VIIa) in 20 cc. EtOH treated at 0° with 1.4 cc. Et3N, shaken 2 h. at 0° and filtered gave [2-(3-methylnaphtho[1',2',4,5]thiazole)] [2 - [3 - (4 - acetylsulfamoylbutyl)benzothiazole]] - monomethinecyanine bromide (VIII) (444, 500,480). Similarly, were prepd, the following dyes (starting materials and g. amts. used are given): [2-[3-[3-(N-methylsulfonylsulfamoyl)propyl]benzothiazole]-2-(3 - ethylthiazoline)]trimethinecyanine bromide (504, 590, 540), 2-methyl-3-[3-(N-methylsulfonylsulfamoyl)propyl] benzothiazolium bromide, 4.29, 2-(2-acetylanilinovinyl)-3-ethylthiazolium bromide, 3.55; [2-(3-methylnaphtho[1',2',4,5]thiazole)] [3-(N-methylsulfonylcarbamoylmethyl)benozhiazolel]monomethinecyanine bromide (444, 500, 480), VII, 3.6, 2-Me - 3 - (N-methylsulfonylcarbamoylmethyl)benzothiazolium bromide, 3.6; [2-[3-(N-methylsulfonylcarbamoyhnethyl)benzoselenazole]] [2 - (3 - ethylbenzothiazole)] mesomethyltrimethinecyanine bromide (550, 670, 605), 2-methyl-3-(N-methylsulfonylcarbamoyhnethyl)benzoselenazolium bromide, 4.12, 2-(2-methyl-2-methylthiovinyl)-3-ethylbenzothiazolium methosulfate, 3.61; (2,3-[2-(N-methylsulfonylcarbamoyl)ethyl] benzothiazole) [2 - (3 - ethylbenzoxazole)]trimethinecyanine iodide (522, 600, 560), 2-methyl-3-[2-(N-methylsulfonylcarbamyl)ethyl] benzothiazolium bromide, 3.79, Va, 4.34; 2-[3-(2-methylsulfonylandnoethyl)benzothiazole] [2-(3-ethylthiazoline)]trimethinecyanine bromide (501, 580, 540), 2-methyl-3-(2-methylsulfonylaminoethyl)benzothiazolium bromide (VIIIa), 5.3, 2-(2-acetylanilinovinyl)-3ethylthiazolinium bromide, 5.3. 2-Methyl-3-(3-acetylsulfamoylpropyl)-5-phenylbenzoxazolium bromide (4.53 g.) and 4.50 g. 2-(2-acetylanilinovinyl)-3-ethylbenzothiazolium iodide (VIIIb) in 20 cc. EtOH treated at 0° with 2.8 cc. Et3N, kept 2 h., and dild. with Et2O, and the ppt. dissolved in warm EtOH, treated with aq. KI, and filtered gave [2- [3 - (3 - acetylsulfamoylpropyl) - 5-phenylbenzoxazole]] [2(3-ethylbenzothiazole)]trimethinecyanine iodide (526, 615, 560). [2-[3-(4-Ethylsulfamoylbutyl)benzoselenazole]]

L7 ANSWER 108 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
[2-(3ethylbenzoselenazole)] mesomethyltrimethinecyanine iodide (IX) (560, 660, 605-10) was prepd, by heating 5.8 g. 2-methyl-3 - (4 - ethylsulfamoylbutyl)benzoselenazolium bromide, 2 g. 2-(2-methylthio-2-methylvinyl)-3-ethylbenzoselenazolium methosulfate, 30 cc. C5H5X, and 2 cc. Et3N 5 min., and pouring into Et2O, dissolving the ppt. in EtOH, and treating the soln. with aq. KI. 2-Methyt-3-(4-acetylsulfamoylbutyl)benzothiazolium bromide (IXa) (4.07 g.). 2.96 g. HC(OEt)3 (X), and 10 cc. Ac2O refluxed 15 min. and cooled gave bis[2- [3- (4-acetylsulfamoylbutyl)benzothiazole]]trimethinecyanine bromide (560, 665, 595). 2-Methyl-3 - [2 - (N-methylsulfonylcarbamoyl)ethyl] benzoselenazolium bromide (4.26 g.), 2.96 g. X, and 25 cc. Ac2O gave similarly

bis[2-[3-(2-(N-methylsulfonylcarbamoyl)ethyiz)benzoselenazole]]trimethinec yanine bromide (576, 670, 605-10), and 4.9 g. 1-ethyl-2-methyl-3-(4-acetylsulfamoylbutyl)-5,6-dichlorobenzimidazolium bromide with 4.4 g. Va gave [2-(3-ethylbenzoxazole)]2-[1-ethyl-3-(4-acetylsulfamoylbutyl) - 5,6 - dichlorobenzimidazole] trimethinecyanine iodide (490, 600, 547). 2-Methyl-3-(N-ethylsulfonylcarbamoylmethyl)benzothiazolium bromide (3.79 g.), 3.24 g. MeC(OEt)3, and 25 cc. C5H5N refluxed 10 min., cooled, and dild. with Et2O pptd. bis[2-[3-(N-ethylsulfonylcarbamoyhnethyl)benzothiazole]] mesomethyltrimethinecyanine bromide (546, 660, 600). 2-Methyl-3-(dimethylaminosulfonylcarbamoylmethyl)benzothiazolium bromide (5.9 g.) and 5.9 cc. MeC(OMe)3 gave similarly bis[2-[3-(dimethylaminosulfonylcarbamoylmethyl)benzothiazole]] mesomethlyltrimethinecyanine iodide (549, 650, 595). 2,5,6-Tri-Me - 3 - (N - methylsulfonylcarbamoylmethyl)benzothiazolium bromide (3.93 g.), 4.5 g. VIIIb, 50 cc. EtOH, and 2.8 cc. Et3N refluxed 15 min. and cooled gave [2-[3-(N-methylsulfonylcarbamoylmethyl) - 5,6 - dimethylbenzothiazole]] [2(3-ethylbenzothiazole)]trimethinecyanine iodide (568, 670, 605-10). Similarly, were prepd. (same data given): [2-(3 ethylbenzoxazole)] [2 - [3 -dimethylaminosulfonylcarbamoylmethyl)benzothiazole]]trimethinecyanine iodide (526, 600, 560), 2-methyl-3-(dimethylaminosulfonylcarbamoylmethyl)benzothiazolium bromide, 2, Va, 2.17; 2-[3-(2-methylsulfonylcarbamoylethyl) - 5 - methylbenzothiazole] [5 - (3 - allyl- rhodanine)]dimethinemerocyanine (530, 640, 605), 2,5-dimethyl-3-(2-methylsulfonylcarbamoylethyl)benzothiazolium bromide, 3.9, 3-allyl-5-acetylanilinomethylidenerhodanine (XI), 3.2; [2-[3-(3-acetylsulfamoylpropyl)benzothiazole]][5-(3-allylrhodanine)]dimethinemerocyanine (524, 640, 605), 2-methyl-3-(3-acetylsulfamoylpropyl)benzothiazolium bromide, 4, XI, 3.2; [2-[3-(2-methylsulfonylaminoethyl)benzothiazole]] [5- (3 -allylrhodanine)] dimethinemerocyanine (XII) (522, 650, 600), Villa, 15.8, XI, 14.3; [2-[3-ethyl-4(3-ethyl-2-benzothiazolinylidenethylidene)-5-thiazolinone]][2 - [3 - (2 - methylsulfonylaminoethyl)ben zothiazole]] monomethinecvanine bromide (611, 710, 660), [2-(3-ethylbenzothiazole)][4-(2-methylthio-3-Et - 5 - thiazolinone)] dimethinemerocyanine methosulfate, 4.75, Villa, 3.5. 2-Methyl- 3 - (N - methylsulfonylcarbamoylmethyl)- 5 - phenylbenzoxazolium bromide (4.25 g.),

L7 ANSWER 108 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
4.5 g. VIIIb, 25 cc. Ac2O, and 2.8 cc. Et3N refluxed 10 min. and cooled gave [2-[3-(N-methylsulfonylcarbamoylmethyl) - 5 - phenylbenzoxazole]] [2- (3ethylbenzothiazole)]trimethinecyanine iodide (526, 620, 560). Similarly were prepd (same data given) [2-[3-(4-acetylsulfamoylbutyl) - 5,6 - dimethylbenzoxazole]] [2 - [3 - (N methylsulfonylcarbamoylmethyl)-5,6-dimethylbenzoxazole] trimethinecyanine bromide (501, 555, 520), 2,5,6-trimethyl-3-(N)-methylsulfonylcarbamoylmethyl)benzoxazolium bromide, 2.4, 2-(2-anilinoyinyl)-3-(4-acetylsulfamoylbutyl)5,6-dimethylbenzoxazolium bromide (XIII), 2.6; anhydro[2- [3 - (4- acetylsulfamoylbutyl) - 5,6-dimethylbenzoxazole]][2-[3 - (sulfocarbomethoxymethyl)benzothiazole]] trimethinecyanine hydroxide (526, 600, 560), XIII, 2.6, 2-methyl-3(sulfocarbomethoxymethyl)benzothiazolium bromide Na salt, 2.0; bis[2-[3-(4-(acetylsulfamoylbutyl)benzothiazole]]pentamethinecyanine bromide (654, 760, 700), IXa, 8.14, 1- anilino-3-phenyliminopropene-HCl, 2.6; 2-(3,3-dicyanopropenylidene)- 3 - (4 - acetylsulfmoylbutyl)benzothiazoline (450, 540, 485), Xa, 4, anilinomethylidenemalononitrile 1.7. VIlla (7 g.) in 30 cc. C5H5N refluxed 0.5 h. with 7 cc. X and dild. with aq. KBr gave bis[2-[3-(2-methylsulfonylaminoethyl)benzothiazole]]trimethinecyanine bromide (563, 665, 595). 2-Methyl-3-(N-methylsulfonylcarbamoylethyl)5-chlorobenzothiazolium bromide (4.1 g.) with 2.96 g. X gave similarly [2-[3-(N-methylsulfonylcarbamoylethyl)-5-chlorobenzothiazole]]trimethinecyanine bromide (570, 675, 610), and 1 g. 2-methyt-3-(3-acetylsulfamoylpropyl)-5-phenylbenzoxazolium bromide with 1 cc. PrC(OEt)3 yielded bis[2- [3-(3 - acetylsulfonylpropyl)-5-phenylbenzoxazole]] mesopropyltrimethinecyanine iodide (506, 580, 555).

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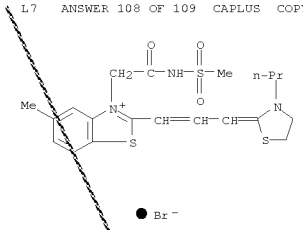
g.) and 3.2 g. XI in 50 cc. EtOH heated 15 min. with 2.8 cc. Et3N and cooled gave [2 - [3 - (2 - methylsulfonylaminoethyl)benzothiazole]] [5 - (3-allylrhodanine]dimethinemerocyanine (535, 675, 590). XII (4.53 g.) and 2.52 g. Me2SO4 heated 10 min. at 120-30o, 2.9 g. of the resulting dye salt (XV), 2.1 g. 2,6-dimethyl-3(sulfocarbomethoxymethyl)benzothiazolium bromide Na salt, 20 cc. C5H5N, and 1.4 ccq. Et2N heated 0.5 h. on the water bath and cooled gave anhydro[2-[3-allyl-5-[3-(2-methylsulfonylaminoethyl) - 2 - benzothiazolinylideneethylidene]-4-thiazolinone]] [2-(3-sulfocarbomethoxymethyl) - 6 - methylbenzothiazole]monomethinecyanine hydroxide (595, 700, 640). XV (2.9 g.), 2 g. 2-methyl-3-ethyl-4,5-diphenylthiazolium iodide, 100 cc. EtOH, and 1.4 cc. Et2N heated 15 min. on a water bath yielded [2-[3-allyl-5-[3-(2-methylsulfonylaminoethyl) - 2 - benzothiazolinylideneethylidene] - 4 - thiazolinone]] [2 - (3 - ethyl-4,5-diphenyl)thiazole] monomethinecyanine iodide (XVI) (591, 700, 640). XII (2.9 g.), 1.75 g. 2-(2-methoxypropylidene)-3-ethylbenzothiazolium methosulfate, 25 cc. C5H5N, and 1.4 cc. Et3N refluxed 15 min. gave the [2-(N-ethylbenzothiazole)]mesomethoxytrimethinecyanine methosulfate analog of XVI (618, - 690). XV (2.9 g.), 0.95 g. 3-allylrhodanine, 30 cc. EtOH, and 1.4 cc. Et3N yielded similarly [2-[3-(2-methylsulfonylaminoethyl)benzothiazole]] [5- [2-(5,3-allyl-2-thio-2,4-dioxothiazolidinylidene)-3-allyl-4-thiazolidinone]] dimethinemerocyanine (568, 700, 640). XV (2.9 g.) with 1.31 g. 3-ethyl-5-(1-phenylethylidene)rhodanine gave similarly [2-[3-(2-methylsulfonylaminoethyl)benzothiazole]] [5- [2-[2-(3-ethyl-2-thio-2,4-di- oxo - 5- thiazolidinylidene) - 2 - phenylethylidene] -3 - allyl - 4-thiazolidinone]]dimethinemerocyanine (630,-, 730). VIIa (4 g.), 1.5 g. p-Me2NC6H4CHO, and 25 cc. Ac2O refluxed 0.5 h., cooled, and dild. with Et2O gave [2-[2-(p-dimethylaminophenyl)vinyl]]-3-(4-acetylsulfamoylbutyl)benzothiazolium bromide (544, 680, 600).

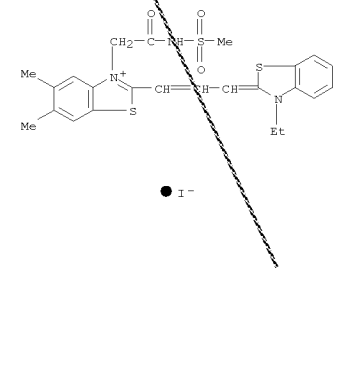
IT 99996-52-8P, Benzothiazolium, 5-methyl-3-[[(methylsulfonyl)carbamoyl]methyl]-2-[3-(3-propyl-2-thiazolidinylidene)propenyl]-, bromide 101983-48-6P, Trimethinecyanine iodide, [2-[3-(N-methylsulfonylcarbamoylmethyl)-5,6-dimethylbenzothiazole]][2-(ethylbenzothiazole)]-
RL: PREP (Preparation)
(preparation of)

RN 99996-52-8 CAPLUS
CN Benzothiazolium, 5-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2-[3-(3-propyl-2-thiazolidinylidene)-1-propen-1-yl]-, bromide (1:1) (CA INDEX NAME)

L7 ANSWER 108 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



RN 101983-48-6 CAPLUS
CN Benzothiazolium, 2-[3-(3-ethyl-2(3H)-benzothiazolylidene)-1-propen-1-yl]-5,6-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, iodide (1:1) (CA INDEX NAME)



L7 ANSWER 109 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1962:71146 CAPLUS
DOCUMENT NUMBER: 56:71146
ORIGINAL REFERENCE NO.: 56:13705g-i,13706a-i,13707a-g
TITLE: Polymethine dyes
INVENTOR(S): Nys, Jean; Depoorter, Henri
PATENT ASSIGNEE(S): Gevaert Photo-Producten N.V.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 569130		19581102	BE	

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PRIORITY APPLN. INFO.: GB 19570705
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AB Substitution at a polymethine dye heterocyclic N atom of an electroneg. hydrophilic group containing at least one SO2 group and consisting of a hydrocarbon radical linked by a CO or SO2 group to NH which in one of the same ways is linked to another hydrocarbon radical, OH, or amino, prevents these dyes from permanently coloring photog. material without destroying their sensitizing power. These new dyes can also have the betaine structure. The following compds. were prepared: Br(CH2)4SO2Cl, b2 98° (new method); Br(CH2)3SO2NH2, m. 60° (from C6H6-petr. ether); Br(CH2)3SO2NHAc, m. 93° (idem); Br(CH2)4SO2Cl, b2.5 128°; Br(CH2)4SO2NH2, m. 68° (idem); Br(CH2)4SO2NHAc, m. 88° (idem); Br(CH2)4SO2NHEt, m. 33-35° (idem); Br(CH2)3SO2NHSO2Me, m. 72° (Me2CO); BrCH2CONHSO2Me, m. 110° (C6H6); BrCH2CONHSO2Et, m. 104° (C6H6); BrCH2CH2CONHSO2Me, m. 130° (C6H6); MeSO2NH(CH2)2Br, m. 49° (Me2CO); Br(CH2)4SO2NHNH2, a white oil; Br(CH2)4SO2NHN(Ac)2, m. 116° (C6H6-C6H14); BrCH2CONHSO2NMe2, m. 84° (C6H6); 2,4-dimethyl-3-(ωsulfamoylpropyl)thiazolium bromide, m. 224° (EtOHEt2O-H2O); 2 - Me -3 - [ω - (acetylsulfamoyl)propyl] - 5-phenylbenzoxazolium bromide, m. 270°; 2 methyl-3-(ω-sulfamoylbutyl)benzothiazolium bromide, m. 243°; 2-methyl- 3- [ω-(acetylsulfamoyl)butyl] benzothiazolium bromide, m. 234-5°; 2-methyl-3-[ω-(methylsulfonylsulfamoyl)propyl]benzothiazolium bromide, m. 180°; 2-methyl-3-[(methylsulfonylcarbamoyl)methyl] benzothiazolium bromide, m. 188°; 2-methyl-3-[(methylsulfonylcarbamoyl)-methyl]benzoselenazolium bromide, m. 104°; 2-methyl-3[(ethylsulfonylcarbamoyl)methyl] benzothiazolium bromide, m. 170°; 2-methyl-3-[β-(methylsulfonylcarbamoyl)ethyl]benzothiazolium bromide, m. 248°; 2-methyl-3-[β-(methylsulfonylcarbamoyl)ethyl]benzoselenazolium bromide, m. 102°; 2,5,6-trimethyl-3-[(methylsulfonylcarbamoyl)methyl]benzothiazolium bromide, m. 114°; 2-methyl-3-[(methylsulfonylcarbamoyl)methyl] - 5- phenylbenzoxazolium bromide, m. 124°; 2-methyl-3-[β-(methylsulfonamido)ethyl]-benzothiazolium bromide, m. 150°; 2,6-dimethyl-3-[ω(acetylsulfamoyl)propyl]benzothiazolium bromide, m.

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218° (EtOH-Et2O); 1 ethyl-2-methyl-3-[w-(acetylsulfamoyl)butyl]-5,6-dichlorobenzimidazolium bromide, m. 225°; 2,4 - di-Me - 3 - [(methylsulfonylcarbamoyl)methyl] thiazolium bromide, m. 228°; 2 methyl-3-[β-(methylsulfonylcarbamoyl)ethyl]-5-chlorobenzothiazolium bromide, m. 115°; 1- [β- (methylsulfonamido)ethyl] - 2-methylquinolinium bromide, m. 226°; 2-methyl-3-[[(dimethylsulfamoyl)carbamoyl] methyl] benzothiazolium bromide, m. 160°; 2-methyl-3-[ω-(acetylsulfamoyl)propyl]benzothiazolium bromide, m. 260°; 2,5-dimethyl-3- [β-(methylsulfonylcarbamoyl)ethyl]benzothiazolium bromide, m. 204°; 2,5,6-trimethyl-3-[ω(acetylsulfamoyl)butyl] benzoxazolium bromide, m. 213-14°; 2 (β-anilinovinyl)-3[ω-(acetylsulfamoyl)butyl]-5,6-dimethylbenzoxazolium bromide, m. 187°; 2,5,6-trimethyl-3-[(methylsulfonylcarbamoyl)methyl] benzoxazolium bromide, m. 174-6° (tetrahydrofuran-Et2O). From these intermediates the following polymethine dyes were prepd. (dye, absorption max. (mμ), Ag halide, sensitizing limit, and sensitization max. given): 2[[3-(ω-sulfamoylpropyl)-4methyl-2- thiazolinylidene]propenyl] -3-ethylbenzoxazolium iodide, 517, Ag bromoiodide (I), 600, 550; 1 methyl-2-[[3(ω - (acetylsulfamoyl)butyl] - 2 - benzothiazolinylidene] methyl]naphtho[1,2-d]thiazolium bromide, 444, AgCl, 500, 480; 2-[(3-ethyl-2-benzothiazolinylidene)propenyl]- 3- [ω-(acetylsulfamoyl)propyl]-5-phenylbenzoxazolium iodide, 526, Ag chlorobromide (II), 615, 560; 2-[(3-ethyl-2-benzoselenazolinylidene)-2-methylpropenyl]-3- [ω- (ethylsulfamoyl)butyl]benzoselenazolium iodide, 560, I, 660, 605-10; 2-[[3-[ω(acetylsulfamoyl)butyl]-2-benzothiazolinylidene]-propenyl]-3-[ω-(acetylsulfamoyl)butyl]benzothiazolium bromide, 560, I, 665, 595; 2-[(3-ethyl-2-thiazolidinylidene)propenyl]-3[ω-(methylsulfonylsulfamoyl)propyl], 504, AgBr, 590, 540; 1-methyl-2- [[3-[(methylsulfonylcarbamoyl)methyl] -2-benzothiazolinylidene] methyl] naphtho [1,2-d] thiazolium bromide, 444, AgCl, 500,480; 2-[[3-[(ethylsulfonylcarbamoyl)-methyl] - 2 - benzothiazolinylidene] - 2 - methylpropenyl] - 3-[(ethylsulfonylcarbamoyl)methyl] benzothiazolium bromide, 546, I, 660, 600; 2-[(3-ethyl-2-benzothiazolinylidene)-2-methylpropenyl] - 3 - [(methylsulfonylcarbamoyl) Me] benzoselenazolium bromide, 550, I 670, 605; 2-[(3-[ωmethylsulfonylcarbamoyl)ethyl] -2-benzoselenazolinylidene]propenyl] - 3 - [ω - (methylsulfonylcarbamoyl)ethyl]benzoselenazolium bromide, 576, I, 670, 605-10; 2-[(3-ethyl-2benzoxazolinylidene)propenyl] - 3-[β-(methylsulfonylcarbamoyl)ethyl]benzothiazolium iodide, 522, AgBr, 600, 560; 2-[(3- ethyl- 2- benzothiazolinylidene)propenyl] -3-[(methylsulfonylcarbamoyl)methyl] - 5,6 - dimethylbenzothiazolium iodide, 568, I, 670, 605-10; 2-[(3-ethyl-2-benzothiazolinylidene)propenyl] - 3 - [(methylsulfonylcarbamoyl)methyl] - 5-phenylbenzoxazolium iodide, 526, AgBr, 620, 560; 2-[[3-[β[(methylsulfonamido)ethyl] - 2 - benzothiazofinylidene]propenyl]-3- [β-(methylsulfonamido)ethyl] benzothiazolium bromide, 563, I, 665, 595; 2-[(3-ethyl-2-thiazolidinylidene)propenyl]-3-[β(methylsulfonamido)ethyl] benzothiazolium bromide, 501, AgCl, 580,

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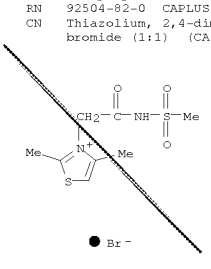
540; 2 [[3-[(methylsulfonylcarbamoyl)methyl] -4- Me - 2 - thiazolinylidene] propenyl] - 3 - benzylbenzoxazolium iodide, 514, I, 600, 555; 2-[(3-propyl-2thiazolidinylidene)propenyl]-3-[(methylsulfonylcarbamoyl)methyl] 5 methylbenzothiazolium bromide, 509, AgBr, 585, 545; 1-ethyl-2- [(3-ethyl-2-benzoxazolinylidene)propenyl] -3-[ω-(acetylsulfamoyl)butyl] - 5,6 - dichlorobenzimidazolium iodide, 490, AgBr, 600, 547; 2-[[3-[β-(methylsulfonylcarbamoyl)ethyl]-5-chloro-2- benzothiazolinylidene] propenyl] -3 - [β - (methylsulfonylcarbamoyl)ethyl] - 5 - chlorobenzothiazolium bromide, 570, I, 675, 610; 2-[(3-ethyl-2-selenazolidinylidene)propenyl] -3 - [ω - (acetylsulfamoyl)propyl]-6-methylbenzothiazolium iodide, 510, AgCl, 570, 545; 2-thio-3-allyl-5-[[3- [β-(methylsulfonamido)ethyl] -2-benzo-thiazolinylidene]ethylidenel-2,4-thiazolidinedione, 535, I, 675, 590; 2-[[3- [ω- (acetylsulfamoyl)propyl] -5-phenyl-2-benzoxazolinylidenel-2-propylpropenyl]-3-[ω-(acetylsulfamoyl)propyl] - 5 - phenylbenzoxazolium iodide, 506, AgBr, 580, 555; 2-[(3-ethyl-2-thiazolidinylidene)propenyl]-3-[ω - [(β - diacetylhydrazino)sulfonyl]butyl]benzothiazolium bromide, 504, AgCl, 570, 540; 2-[[3-[(methylsulfonylcarbamoyl)methyl] - 5,6 - dimethyl-2 - benzoxazolinylidene[propenyl] - 3 - [ω- (acetylsulfamoyl)butyl] - 5,6 - dimethylbenzoxazolium bromide, 501, AgBr, 555, 520; 2-[[3-(sulfometh-oxycarbonylmethyl) - 2 - benzothiazolinylidene] propenyl] - 3[ω- (acetylsulfamoyl)butyl] - 5,6 - dimethylbenzoxazolium betaine, 526, I, 600, 560; 2-[[3-[ω-(acetylsulfamoyl)butyl]-2 - benzothiazolinylidene] - 1,3 - pentadienyl] - 3 - [ω - (acetyl-sulfamoyl)butyl]benzothiazolium bromide, 654, AgCl, 760, 700 (in the presence of 10 g. of 1 hydroxy-2-stearoylaminonaphthalenesulfonic acid (III)); 4-[3-[ω-(acetylsulfamoyl)butyl] - 2 - benzothiazolinylidene] -2-cyano-2 - butyronitrile, 450, II, 540, 485; 1-[β-(methylsulfonamido)ethyl]-2-[(3- Me - 2 - benzothiazolinylidene)methyl] quinolinium bromide, 486, I, 560, 540; 2-[[3-[[(dimethylsulfamoyl)carbamoyl]methyl]-2-benzothiazolinylidene] propenyl] -3- ethylbenzoxazolium iodide, 526, I, 600, 560; 1-phenyl-3-methyl-4 - [[3- [ω - (acetylsulfamoyl)propyl]-6- Me -2 - benzothiazolinylidene]-1-methylethylidene]-5-pyrazolone, 492, AgBr, 620, 540; 2-thio-3-allyl-5-[[3-[β-(methylsulfonylcarbamoyl)ethyl] - 5 - Me - 2 - benzothiazolinylidene] ethylidene]-2,4-thiazolidinedione, 530, II, 640, 605; 2-[[3-[[(di- methylsulfamoyl)carbamoyl]methyl] - 2 - benzothiazolinylidene] - 2 - methylpropenyl] - 3 - [(dimethylsulfamoyl)carbamoyl]methyl]benzothiazolium iodide, 549, I, 650, 595; 2-thio-3-allyl-5- [[3- [ω-(acetylsulfamoyl)propyl] -2-benzothiazolinylidene] ethylidene]-2,4-thiazolidinedione. 524, AgCl, 640, 605; 2-thio-3-allyl-5-[[3-[β-(methylsulfonamido)ethyl] -2-benzothiazolinylidene] ethylidene] -2,4 - thiazolidinedione, 522, II, 650, 600; 2-[[3-(sulfomethoxycarbonylmethyl)-6-methyl-2-benzothiazolinylidene] methyl]-3-allyl-4 oxo- 5 - [[3 - [β - (methylsulfonamido)ethyl) - 2 - benzothiazolinylidene]ethylidene]thiazolinium betaine, 595, I, 700, 640; 2-[(3 - Et - 4,5 - diphenyl-2 - thiazolinylidene)methyl] - 3-allyl-4-oxo-5- [[3- [β- (methylsulfonamido)ethyl] -2-benzothiazolinylidene]ethylidene]thiazolinium iodide, 591, I, 700, 640; 2-[(3-ethyl-2-benzothiazolinylidene)-2-methoxypropenyl]-3-allyl-4-oxo-5-[[3-[β- (methylsulfonamido)ethyl]-2 - benzothiazolinylidene]ethylidene]thiazolinium methosulfate, 618, AgCl, -, 690 (in the presence of 10 g. III); 2 - [[3 - [β -

L7 ANSWER 109 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)
(methylsulfonamido)ethyl] - 2 - benzothiazolinylidene] methyl]-3-ethyl-4-[(3-Et - 2 - benzothiazolinylidene)ethylidene]-5-oxothiazolinium bromide, 611, I, 710, 660; 2-(2-thio-3 allyl-4- oxo- 5-thiazolidinylidene) - 3 - allyl - 5- [[3[β - (methylsulfonamido)ethyl] - 2 - benzothiazolinylidene]-ethylidene]-4-thiazolidinone, 568, I, 700, 640; 2-[(2-thio-3-Et - 4 - oxo - 5 - thiazolidinylidene) - 2- phenylethylidene] - 3-allyl-5-[[3-[β-(methylsulfonamido)ethyl]-2-benzothiazolinylidene]ethylidene]-4-thiazolidinone, 630, I, -, 730; and 2(p-dimethylaminostyryl)-3-[ω-(acetylsulfamoyl)butyl]benzothiazolium bromide, 544, AgCl, 680, 600.

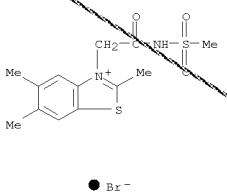
IT 92504-82-0P, Thiazolium, 2,4-dimethyl-3-[[(methylsulfonyl)carbamoyl]methyl]-, bromide
96435-22-2P, Benzothiazolium, 2,5,6-trimethyl-3-[[(methylsulfonyl)carbamoyl]methyl]-, bromide
96435-23-3P, Benzoxazolium, 2,5,6-trimethyl-3-[[(methylsulfonyl)carbamoyl]methyl]-, bromide
99996-52-8P, Benzothiazolium, 5-methyl-3-[[(methylsulfonyl)carbamoyl]methyl]-2-[3-(3-propyl-2-thiazolidinylidene)propenyl]-, bromide 101983-48-6P, Benzothiazolium, 2-[3-(3-ethyl-2-benzothiazolinylidene)propenyl]-5,6-dimethyl-3-[[(methylsulfonyl)carbamoyl]methyl]-, iodide 106599-46-6P, Benzoxazolium, 3-[4-(acetylsulfamoyl)butyl]-2-[3-[5,6-dimethyl-3-[[(methylsulfonyl)carbamoyl]methyl]-2-benzoxazolinylidene]propenyl]-5,6-dimethyl-, bromide
RL: PREP (Preparation)
(preparation of)

RN 92504-82-0 CAPLUS
CN Thiazolium, 2,4-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)



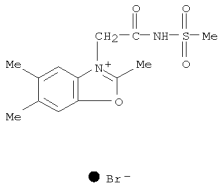
RN 96435-22-2 CAPLUS
CN Benzothiazolium, 2,5,6-trimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)

L7 ANSWER 109 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



● Br⁻

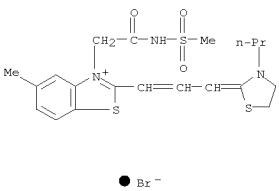
RN 96435-23-3 CAPLUS
CN Benzoxazolium, 2,5,6-trimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)



● Br⁻

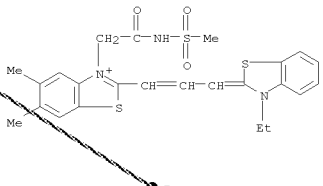
RN 99996-52-8 CAPLUS
CN Benzothiazolium, 5-methyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2-[3-(3-propyl-2-thiazolidinylidene)-1-propen-1-yl]-, bromide (1:1) (CA INDEX NAME)

L7 ANSWER 109 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



● Br⁻

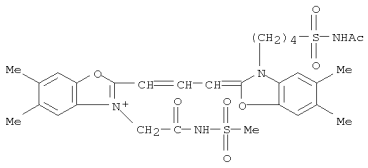
RN 101983-48-6 CAPLUS
CN Benzothiazolium, 2-[3-(3-ethyl-2(3H)-benzothiazolylidene)-1-propen-1-yl]-5,6-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, iodide (1:1) (CA INDEX NAME)



● I⁻

RN 106599-46-6 CAPLUS
CN Benzoxazolium, 2-[3-[3-[4-[(acetylamino)sulfonyl]butyl]-5,6-dimethyl-2(3H)-benzoxazolylidene]-1-propen-1-yl]-5,6-dimethyl-3-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, bromide (1:1) (CA INDEX NAME)

L7 ANSWER 109 OF 109 CAPLUS COPYRIGHT 2010 ACS on STN (Continued)



● Br⁻